10¢ A COPY

The OIL WEEKLY

...ARY ...
...N & ...ER
N... YO...

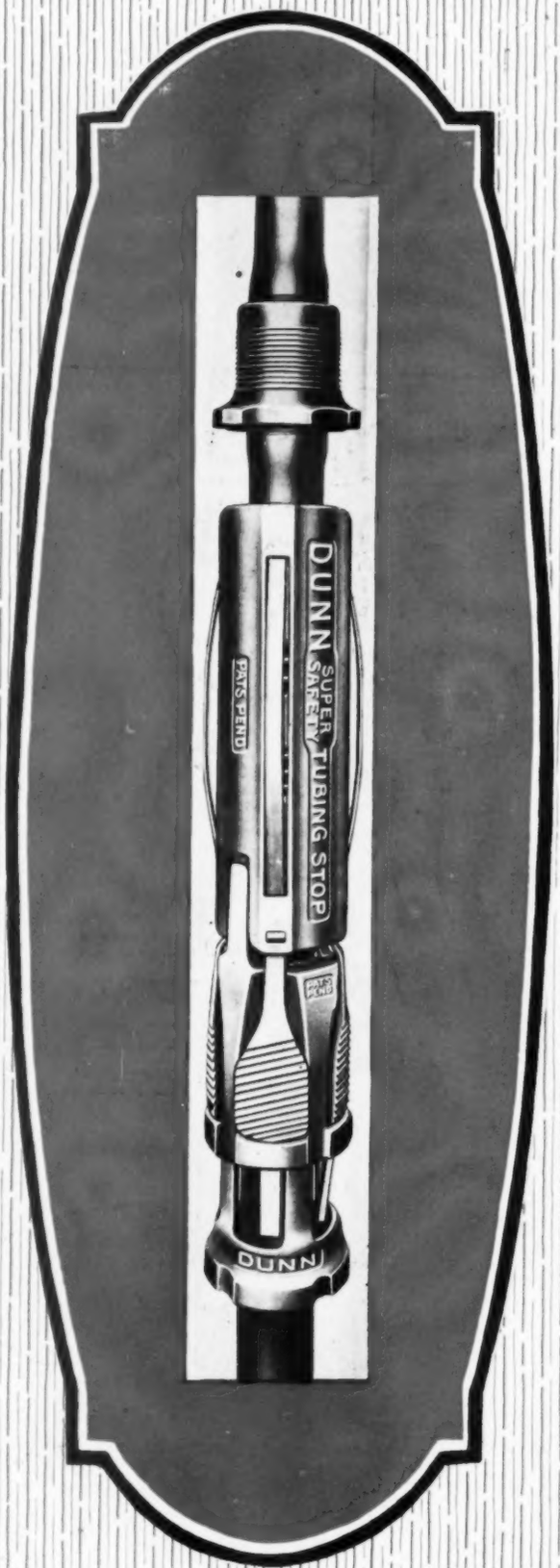
May 20, 1927 Volume 45. No. 9

INTERNATIONAL
IDECO
Wheels

STRENGTH
EFFICIENCY
ECONOMY
LONGEVITY

THE INTERNATIONAL DERRICK AND EQUIPMENT COMPANY
COLUMBUS, OHIO TORRANCE, CAL.

(DUNN TOOLAGRAM)



The DUNN SUPER-SAFETY TUBING STOP

Increases Production

Ideal for Wells With Air or Gas Lift

A tubing safety device developed along entirely new principles of design and construction. It may be run through heavy fluid or gas pressure, as rapidly as desired, without setting, thereby reducing off-pump hours to a minimum with a corresponding increase in production. Is especially adapted to wells operated with air or gas lift.

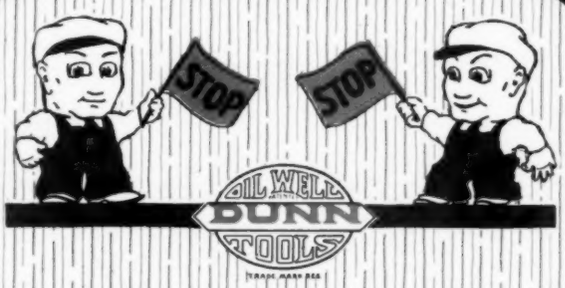
Simple in construction, fool proof and 100 per cent dependable in operation. It stands for all its name implies—a tubing stop THAT STOPS—stops the falling string safely, instantly and infallibly.

Try it at our risk, without obligation. Particulars on request.

DUNN
MANUFACTURING COMPANY
OXNARD, CALIFORNIA

Mid-Continent Branch Warehouse
215 East Archer St. Tulsa, Oklahoma

Export Sales Office
150 Broadway, New York City



DUNN SAFETY *means* DONE SAFELY

The OIL WEEKLY. Issued weekly by the Gulf Publishing Co., 1716 Dallas Ave., Houston, Texas. Subscription price $1.00 per year; 10 cents per copy. Entered as second-class mail matter December 23, 1916, at the post office at Houston, Texas, under act of March 3, 1879.

SAND ... RTER
MAY 23 1927
REF'D TO

CHAMPIONS

The qualities that make for championship in the ring—ability to take punishment, withstand abuse, and "deliver" in the face of grueling circumstances—are precisely the qualities that make for championship in the field of oil industry pumps.

Being modest, we hesitate to claim the latter honor—but we *are* building another 50 per cent addition to our plant.

May we send you our catalog?

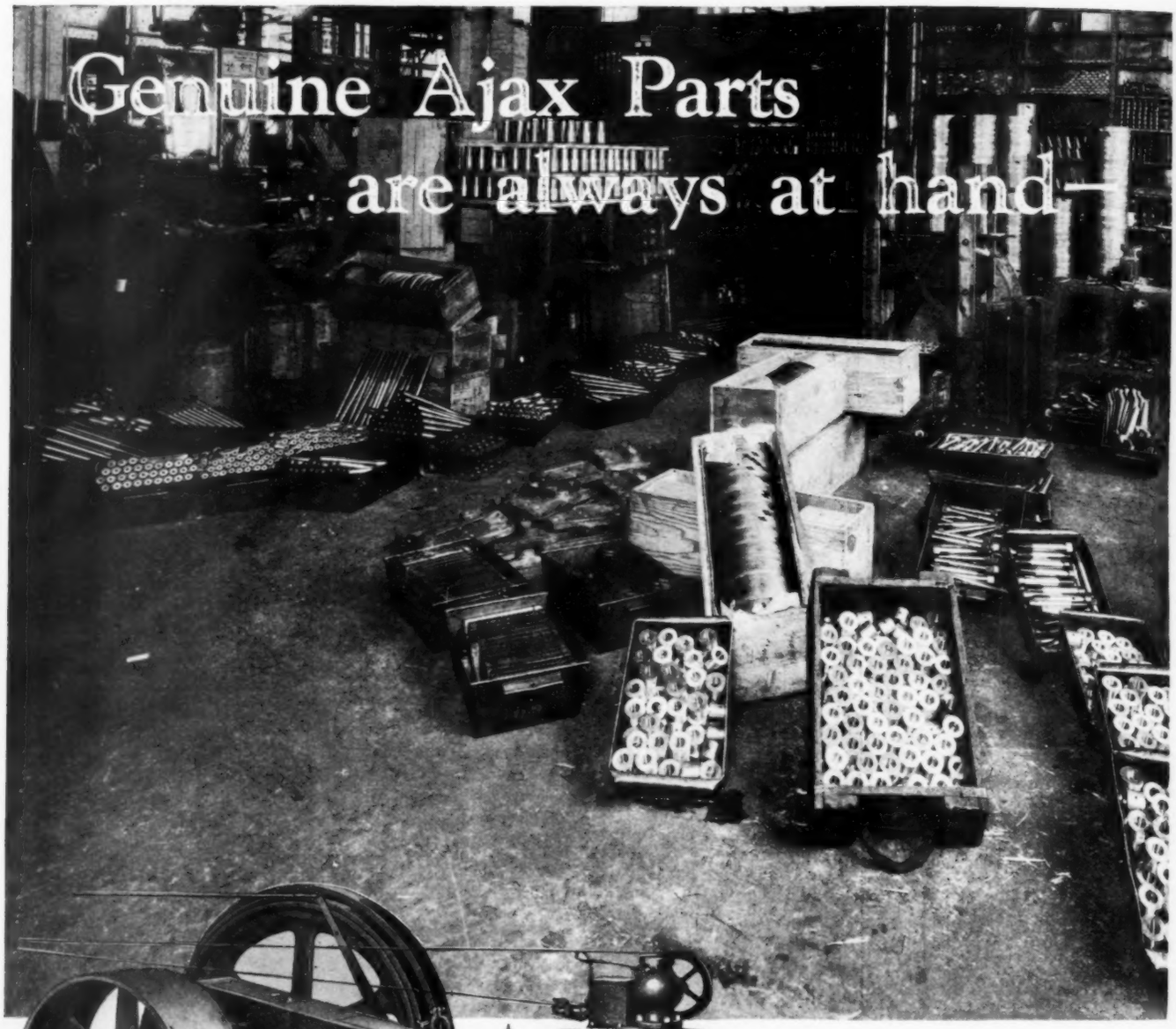
GASO PUMP & BURNER MFG. COMPANY
Tulsa, Oklahoma

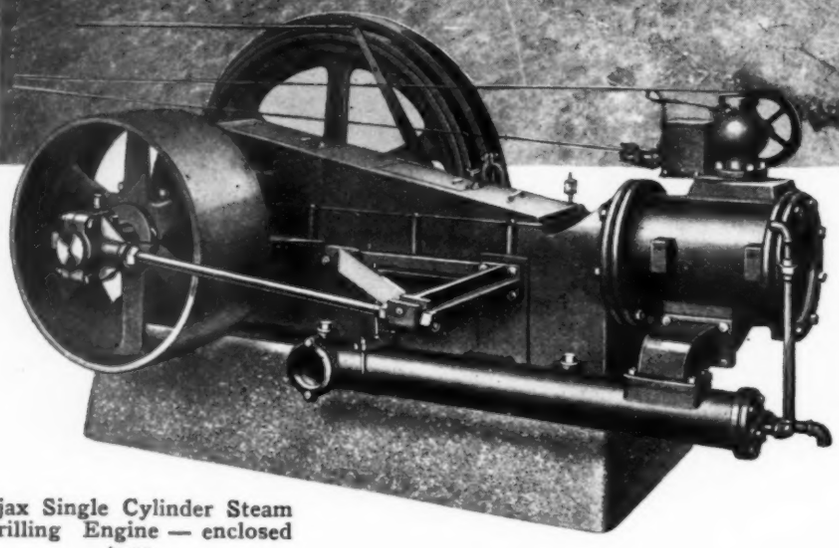
Two Unusually Popular Members of the GASO Family

No. 1012 [at left]—GASO Horizontal Duplex Gear-Driven Discharge Pump. Capacity, 130 to 204 gallons a minute against pressures from 700 to 900 pounds per square inch.

No. 1018—GASO Horizontal Duplex Gear-Driven Suction Pump, available in three sizes—6, 8, or 10 x 18.

GASO PUMPS
for every oil industry need





Ajax Single Cylinder Steam Drilling Engine — enclosed type.

A view of the parts stock and shipping departments at the Ajax Factory.

AJAX DRILLING

Mention Where You Saw the Advertisement

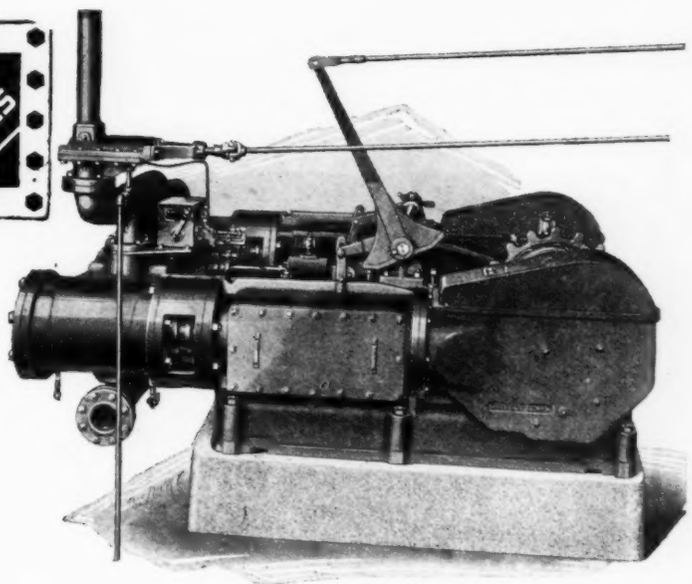
THOUGH you may be drilling on the edge of the newest field you know that any of the wearing parts of either the Ajax or Ideal Twin Engines can be promptly replaced. The nearest store of the National Supply Companies has a complete stock—never very far away.

Incidentally, Ajax engines require less frequent replacement of wearing parts than other engines. This is due to the fine precision of Ajax workmanship and the careful allowance for thorough and fool-proof lubrication that is part of Ajax design.

Made by
AJAX IRON WORKS
Corry, Pa.

DISTRIBUTED BY
THE NATIONAL SUPPLY COMPANIES

AJAX ENGINES



A Genuine Ajax Part is worth getting. It maintains the original performance and original value of your engine.

Ideal - Ajax Twin Drilling Engine—enclosed type.

STEAM ENGINES

Mention Where You Saw the Advertisement

The Perfection Core Barrel

A Dependable Coring Tool

Manufactured by

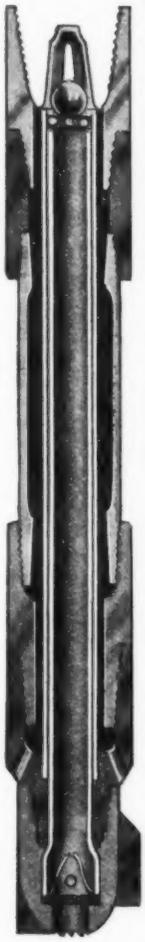
OIL CITY IRON WORKS, INC.

SHREVEPORT, LOUISIANA

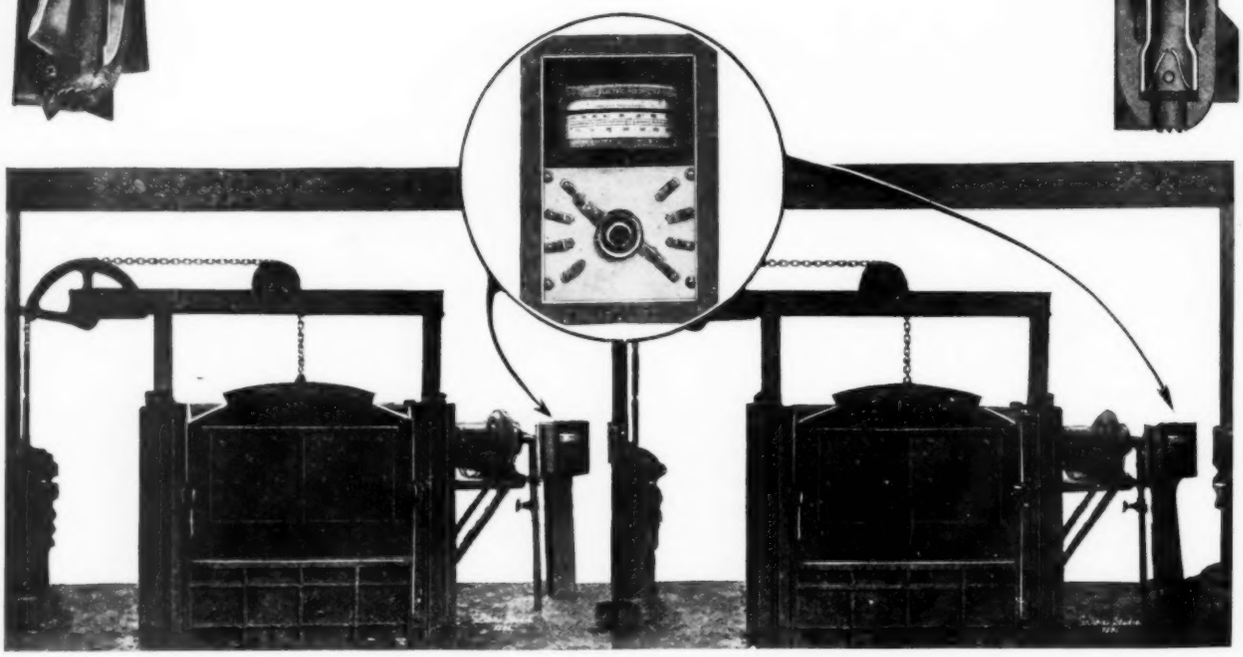
Write us for pamphlet and prices.

Stocked by
Wilson Supply Co.
Houston, Texas

Hercules Supply Co.
Dallas, Texas



A PERFECT CORE CUTTER



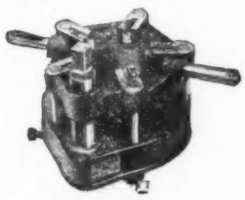
A BATTERY OF HEAT TREATING FURNACES, equipped with Electric Automatic Controlled Pyrometers, (See insert), Where PERFECTION CORE BARRELS and PARTS are scientifically heat treated.

ALL CORE BARREL BIT HEAD and PARTS, TOOL JOINTS, DRILL BITS and DRILL COLLARS are given a scientific treatment with this equipment, thus insuring an equal HARDNESS and TOUGHNESS of material never before obtained by the old process.

A Letter from Harry G. Nye

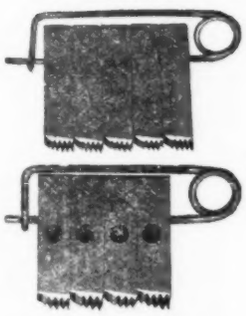
The rugged construction and few working parts account for the simplicity and durability of these Nye Receding models. They do the work easily and efficiently.

No. 1 Nye Receding Pipe Threader, complete ....$9.60 net
West of Rocky Mountains. $10.80



NYE NO. 2
Geared Threading Device Improved

Capacity 2½ to 4 in. inclusive
Net price complete $50.00
West of Rocky Mountains .. 55.00
FREE TRIAL—ABSOLUTELY GUARANTEED



Nye Chasers
Fit Nos. 1, 1A and 2 Receding Die Stocks

Each set is guaranteed in every particular. Will cut much easier than other similar dies.

No. 1, 1" to 1½" $ .75 per set net
No. 1, 2" ..... 1.25 per set net
No. 2, 2½" to 4" 3.60 per set net

To the Oil Men of the U. S. A.
Fellow Citizens:

Well, the baseball season is in full swing again, and, as usual, it looks like one of the greatest years in the history of the game, if the fans give the players an even break, which they won't. Old Nero throwing Christians to the lions, or the Kiwanians or whoever it was, was a nice old gentleman distributing bags of candy in Sunday school, compared to some of these leather-lunged and paper-brained knockers who inhabit the baseball park.

Of course, some folks will say that it's just home pride that makes them act that way, although to me it looks more like it was home brew. Well, if knocking some brother engaged in his daily employment is home pride, heaven deliver me from ever having any, although I have a lot. Whenever I see some kid pitcher from Arkansas who is on one of the Chicago teams strike out some slugger from Texas who is on one of the New York teams, my bosom swells with home pride as much as anybody's.

But, no matter where they come from, you seldom have a good team except in a good town. Some of these outdoor orators think that they knock the team because it is in last place; more likely it is in last place because they knock. If you don't think so, you might try yelling "Take him out!" and "you're rotten!" around the shop every day, and see how the men will love their work. And, of course, you would like to have some milkman telling you how to run the oil business.

I don't know how it is with your team in your town, but our team has one manager and 24,796 assistant managers. There are at least that many fellows in our town who could run the team better than the manager can run it, if they weren't already running a truck or clerking in a drygoods store. They know just where he made his mistake. So does he. It was in trying to build up a team that would please a wrecking crew.

Let's give the manager an even break, and the players a little more. I don't mean the fellow who bats around .133 because he bats around the night before. I don't mean the pitcher who eats pretzels all night and then expects to throw pretzels the next day. I mean the fellow who is doing his best to do his best. We don't all field 1.000 in our business, so let's not expect a third baseman to do it. We haven't any right to kick unless he is worse at his job than we are at ours, which isn't likely.

Why, as far as this concern is concerned, we don't even knock our competitors. They're doing the best they can with what they have.

Yours truly,

HARRY G. NYE

Otherwise Known As

THE NYE TOOL & MACHINE WORKS

4120-30 Fullerton Avenue

Chicago, Ill.

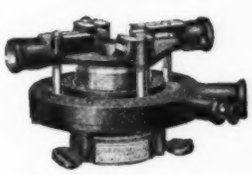
P. S. Who do I think will win the pennant this year? Nye tools, of course. They cut pipe without an error and make a hit with every man who uses them. Use Nye tools and lead the oil league in your town.

Yours truly,

(Copyright, 1927, by Harry G. Nye. All rights reserved)

Nye Barnes Pipe Cutters

No. 1 .....$ 2.25 net
No. 2 ..... 3.00 net
No. 3 ..... 5.00 net
No. 4 ..... 10.00 net
No. 5 ..... 15.00 net
No. 6 ..... 20.00 net



The No. 1A is the same as the No. 1 except that it is equipped with a ratchet for work where space is restricted.

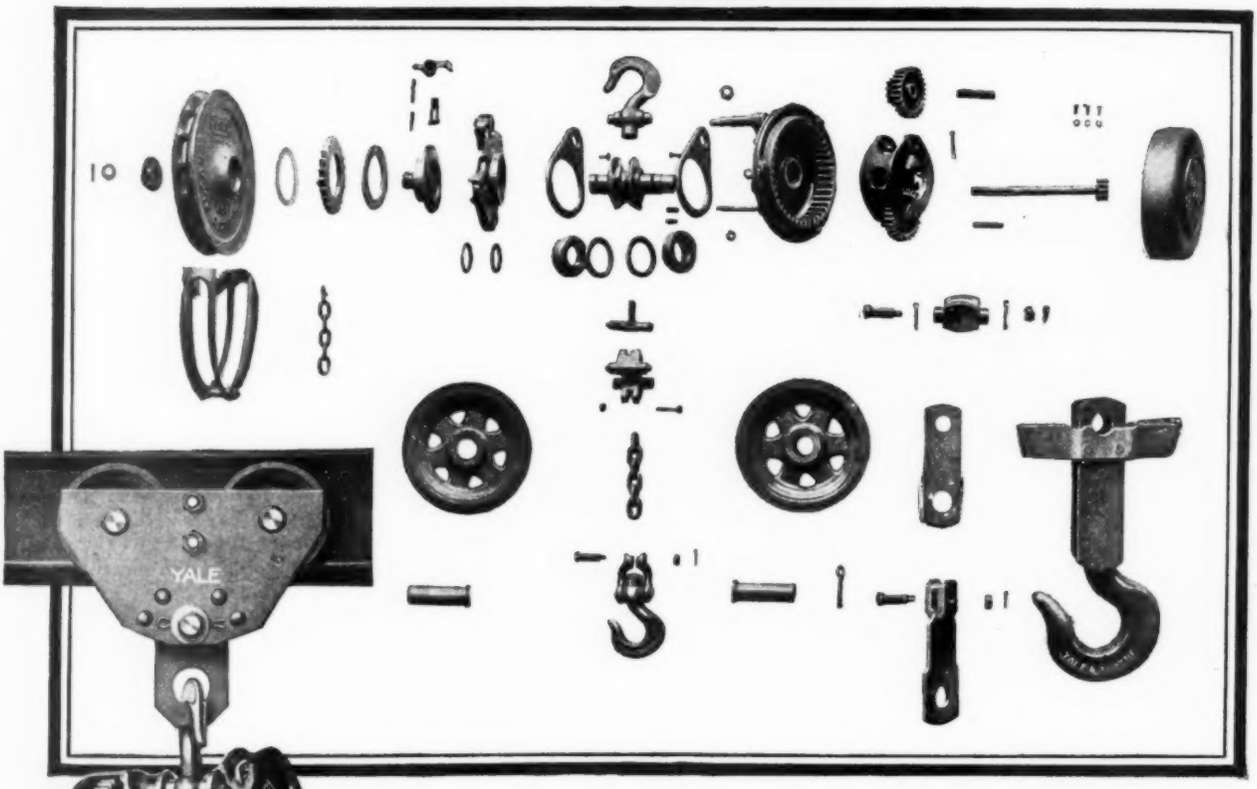
No. 1A Nye Receding Pipe Threader, complete ..$12.00 net
West of Rocky Mountains. $13.50

Nye thin blade cutter wheel, made to fit all standard makes of pipe cutters, and guaranteed against breakage in use. Made both in smooth and knurled edge.

Nye Saunders Pipe Cutter

No. 1 .....$ 1.80 net
No. 2 ..... 2.70 net
No. 3 ..... 6.60 net
No. 4 ..... 10.80 net
No. 5 ..... 16.80 net

TRADE **YALE** MARK



Every Part of Every Yale Chain Block *is Yale Made*

The above graphic illustration shows the essential parts in a Yale Ball Bearing Spur-geared Chain Block—drop forgings—steel, malleable, bronze and grey iron castings—heavy steel and chrome vanadium stampings and die formed steel load chain.

All of these parts are Yale made in the Yale plant and the purchaser is assured that because of this he secures a chain block superior to one produced *in any other way*.

Every chain block bearing the name Yale is the result of

- Yale research and experience in the selection of materials
- Yale development of correct formulae for metal composition
- Yale ingenuity in designing
- Yale accuracy of machining and processing
- Yale inspection and super testing
- Yale ability to secure utmost uniformity in product
- Yale reputation for dependability.

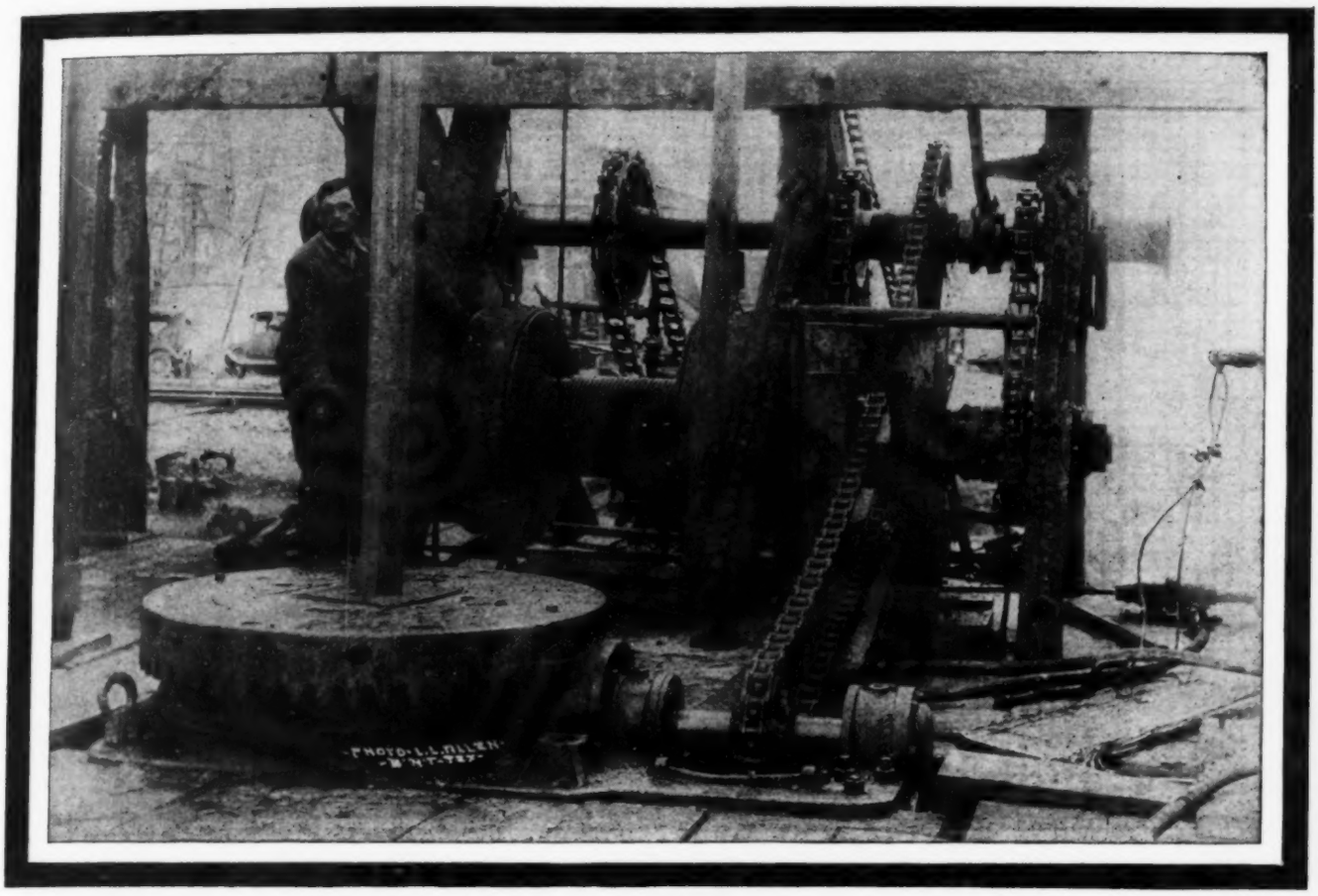
Every salesman handling Yale Ball Bearing Spur-geared Chain Blocks, Yale Screw-geared Chain Blocks and Yale Differential Chain Blocks, is equipped to demonstrate the superiority of this product as the only one with *every part made by the manufacturer.*

The Yale & Towne Mfg. Co., Stamford, Conn., U. S. A.

Canadian Branch at St. Catharines, Ontario

YALE MARKED IS YALE MADE

YALE **Hoisting and Conveying Systems**



This Lucey Rotary has made over 40,000 feet of hole in the Spindletop Fields to date!

Wherever THE NAME IS A LUCEY GUARANTEE *there's Oil*

The illustration shows Mr. E. R. Scales, Driller, with a Lucey Rotary on the T. & N. O. lease No. 54 of the Rio Bravo Oil Company in the Spindletop Field, near Beaumont, Texas. This rotary of the latest Lucey design has made better than 40,000 feet of hole, and is one of a number of Lucey Rotaries being used in drilling the majority of the best producers at Spindletop.

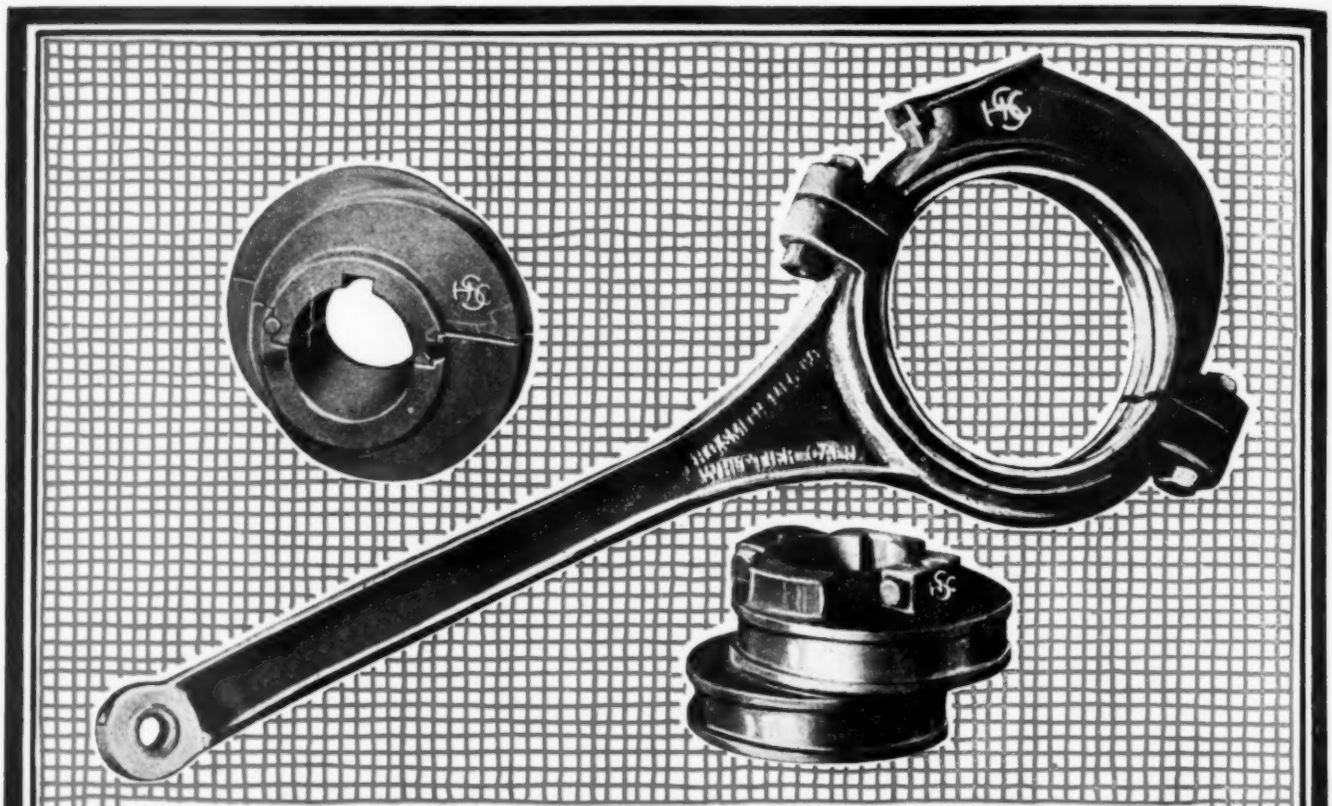
Lucey Rotaries have always represented the very latest in design and construction since their introduction in 1901—and their performance during their twenty-six years of existence has always been uniformly satisfactory.

LUCEY MANUFACTURING CORPORATION
CHATTANOOGA, TENN.

DISTRIBUTORS:

LUCEY PRODUCTS CORP.
EXPORT: 3505 Woolworth Bldg., New York, N. Y.
DOMESTIC: Brady & Detroit Streets, Tulsa, Oklahoma; 416 West Eighth Street, Los Angeles, Calif.

T. T. WORD SUPPLY CO., Houston, Texas
AGENTS: International Supply Co., Tulsa, Okla.; Bradford Supply Co., Wichita Falls, Texas; George J. Hausen, Taft, Calif.



A New

Eccentric Assembly That Banishes Repairs & Adjustments

Nemec Eccentric Straps

The Nemec All Steel Eccentric Strap with renewable, heavy duty bronze liners, in combination with the improved Smith Eccentric Hub, comprises an Eccentric Assembly which eliminates breakdowns, repairs and adjustments on all types of drilling engines.

The strap and arm are constructed of one piece of steel, dispensing with antiquated studs, and when the liners are worn, new ones may be inserted without removing the strap from the engine.

Smith Eccentric Hubs

The Smith All Steel Eccentric Hub is a decided improvement in the design and construction of eccentric hubs for twin drilling engines, saving time, money and repairs. Dovetail construction has been eliminated, taper pins being used for joining the two halves together. The drive sprocket on the shaft need never be disturbed when installing these hubs. Will outlast the engine. Write for literature.

H. C. SMITH MANUFACTURING CO.

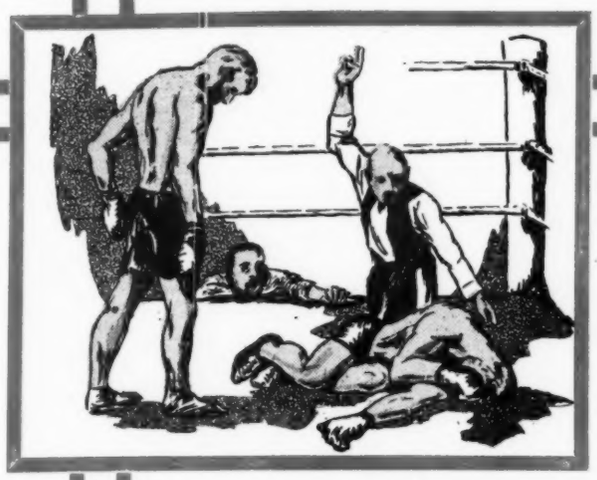
WHITTIER, CALIFORNIA.

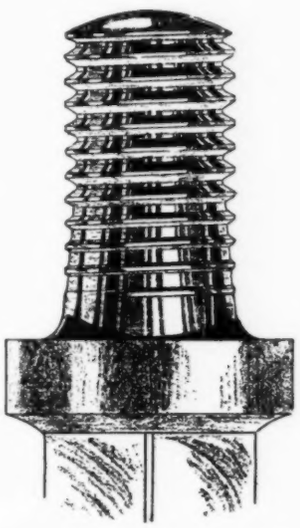
Branch Offices and Warehouses:

Taft, California. Ventura, California.

Harry B. Shine, Sales Agent, 2408 McKinney Ave., Houston, Texas.

All Supply Houses.





—And sucker rod STEEL that can stand the fight without fatigue, for months and years is the STEEL that wins.

The purity of *Electric Steel* makes it 20% stronger than any other steel of the same analysis.

Added to this advantage *Texas Electric Steel Sucker Rods* have the even greater endurance given by our **special analysis.**

Threaded to A. P. I. Standards.

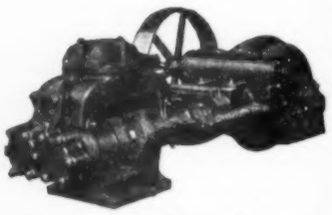
TEXAS STEEL CO.

ELECTRIC STEEL MAKERS, ROLLERS AND FINISHERS

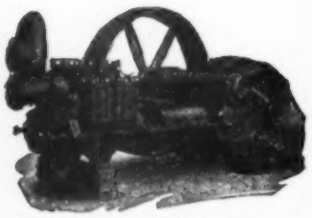
FORT WORTH, TEXAS

Say you saw it in The OIL WEEKLY

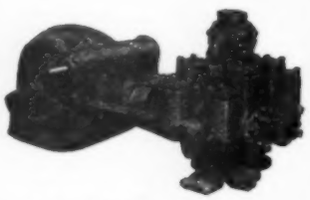
The most *complete* line of mud pumps in the world



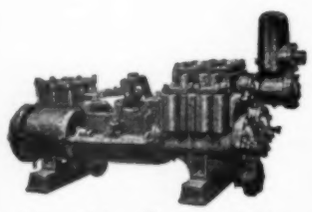
Flood-Lubricated, Power Driven Pumps for Portable Rigs—3½x5, 4x6, 3x10, 4x10 and 4½x10. Patents Pending.



Flood-Lubricated, Power Driven Booster—4x12, 4½x12, 5x12 and 5¾x12. Patents pending.

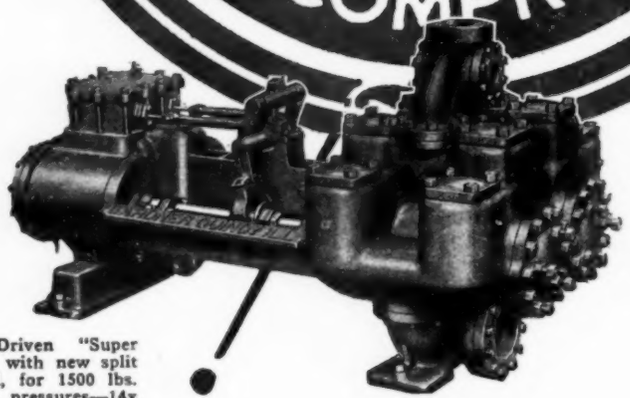


Enclosed Self-Lubricated, Power Driven "Super Booster"—7¼x14 and smaller.



Steam-Driven Booster with improved Lubrication features—14x4½x12, 14x5x12, 14x5¾x12 and 14x6¾x12.

GARDNER GOVERNORS PUMPS · COMPRESSORS



Steam Driven "Super Booster" with new split fluid end, for 1500 lbs. working pressures—14x7¼x14 and smaller sizes.

Send for bulletins

"Quality Builders for Over 65 Years"

THE GARDNER GOVERNOR COMPANY

Quincy, Ill.

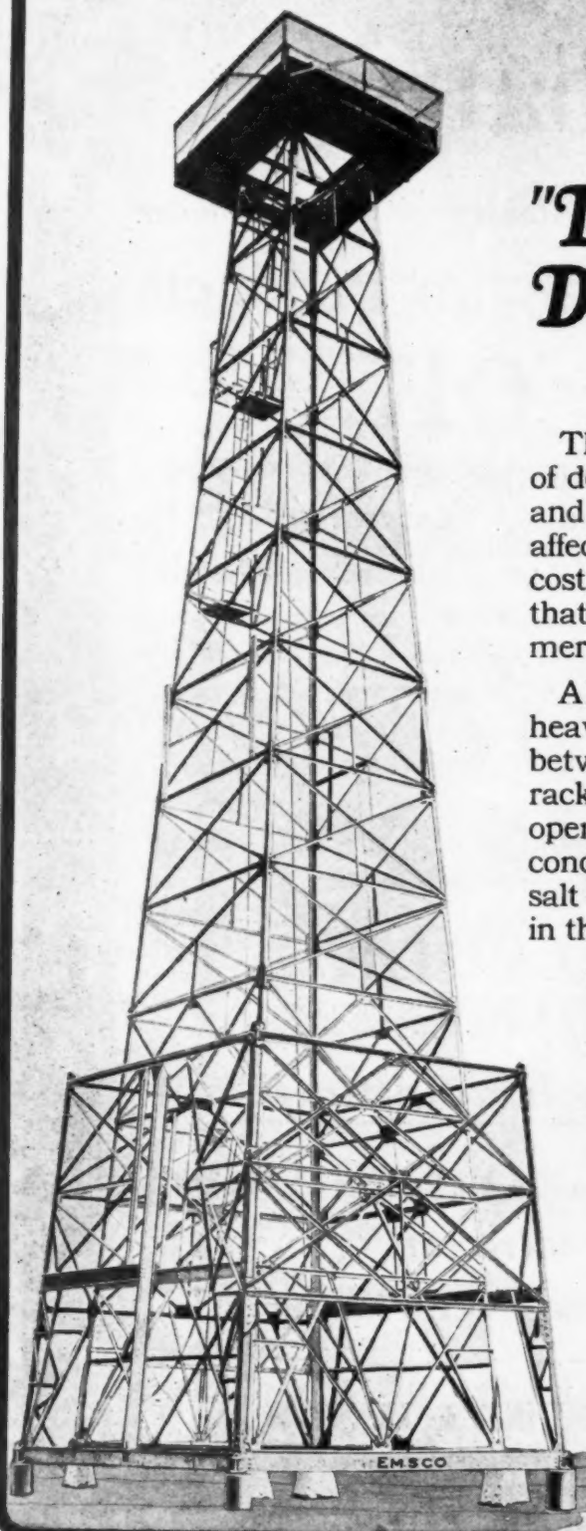
CHICAGO 549 Washington Blvd. · NEW YORK 534 Singer Bldg. · PHILADELPHIA 604 Arch St. · MUSKOGEE 323 Dayton St. · HOUSTON 611 2nd Nat'l Bank Bldg. · SAN FRANCISCO 401 Rialto Bldg. · LOS ANGELES 684 Santa Fe Ave. · LONDON 25 Bishopsgate E. C. 2

OIL COUNTRY DISTRIBUTORS:

Alamo Iron Works, San Antonio, Texas
Atlas Supply Company, Muskogee, Tulsa and Ft. Worth
Kirk W. Eichelberger, 401 Rialto Bldg., San Francisco
Emsco Derrick & Equipment Co., 6811 So. Alameda St., Los Angeles, Calif.
Haywood-Williamson, Shreveport and El Dorado
F. W. Heitmann Company, Houston
International Supply Co., Stores in all principal Mid-Continent fields
Norvell-Wilder Hdwe. Company, Beaument, Houston and Ft. Worth
The Republic Supply Company of California, Stores in all principal California Oil Fields.

GARDNER

EMSCO
A Complete Line of Better Oil Well Equipment



The Emsco "Dual" Combination Drilling & Pumping Derrick

The Emsco "Dual" combines two heights of derricks in one rig—a drilling derrick and a pumping derrick. This combination affects such tremendous economies in first cost, erection, operation and in salvaging that no other derrick can approach it in merit where two such rigs are required.

All steel of large cross section, and heavily reinforced with sturdy cross braces between each girt, it will defy the hardest racking strains of drilling and pumping operations. Heavily galvanized, climatic conditions won't "faze" it whether near salt water, in the foggy "back country," or in the tropics.

Write for the Emsco Book of All Steel Derricks

EMSCO
Derrick & Equipment Company
of Texas
Houston, Texas
Los Angeles, California
New York Office 150 Broadway

Emsco Steel Equipped Wells Are Safe

Magnolia Petroleum Company

Producer *Refiner* *Jobber* *Distributer*

High Grade Petroleum Products

FUEL OIL

LOADING STATIONS AT

BEAUMONT CORSICANA SABINE GALVESTON FT. WORTH
HARBOR ISLAND LULING CORPUS CHRISTI DALLAS
HERMA, ARK. MIRANDO

MANUFACTURER OF

Magnolene
REG. U.S. PAT. OFFICE

THE
DEPENDABLE LUBRICANT

"a grade for each condition"

For satisfactory operation of Ford Cars use Magnolene Motor Oil for Fords

REFINERIES LOCATED AT

Beaumont, Corsicana and Ft. Worth

General Offices: DALLAS, TEXAS

DIVISION SALES OFFICES:

DALLAS HOUSTON FT. WORTH SAN ANTONIO OKLAHOMA CITY LITTLE ROCK
AMARILLO EL PASO

Inquiries Respectfully Solicited

SPECIFY

Spang Weldless Drilling Jars for that added margin of strength and Endurance

Patented Oct. 6, 1925
Other Patents Pending

As an experienced oil man, you know the expensive and sometimes disastrous results of a broken jar. In view of this, can you afford the extravagance of using anything but the best in drilling jars?

We call your attention to the fact that Spang is the one and only drilling jar that is *weldless* eliminating the one common weakness of ordinary drilling jars. Furthermore, the Spang Weldless Drilling Jar is forged from a single billet of selected alloy steel, then specially heat treated, which solidifies the texture of the steel into a mass of toughness and strength that gives the super-strength which Spang Jars possess.

It is this added margin of strength and endurance that has established the world leadership of Spang Weldless Drilling Jars. They are the logical answer to the question—Can you afford the extravagance of using anything but the best in drilling jars?

Over 300 Supply Houses carry complete stocks for immediate delivery.

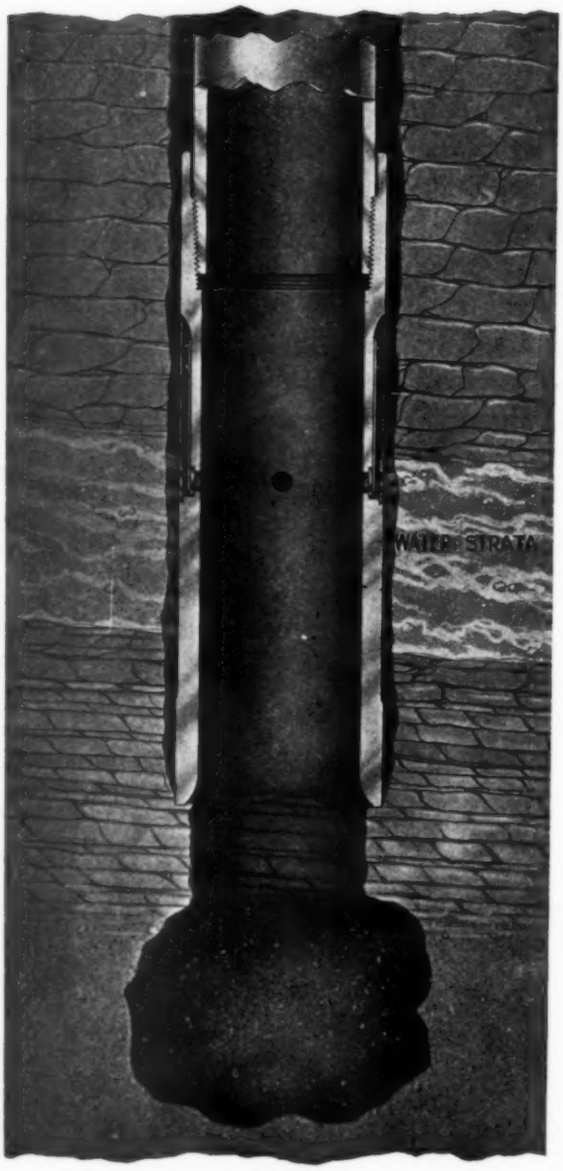
Spang Thread Protector

Protect your Tool Joints with SPANG Thread Protectors. Like all Spang products they guarantee absolute satisfaction and long, durable service.

Patented Oct. 6, 1925
Other Patents Pending

SPANG AND COMPANY
BUTLER, PENNA.

Sold by All Leading Supply Houses



Patented

CROWELL

Makesure CEMENT BARREL OR SHOE

Lorraine Built

Takes the Guess Out of Cementing Jobs

The Crowell "Makesure" Cement Barrel or Shoe is all the name implies—it positively eliminates the "guess" in all cementing jobs—anywhere—no matter how rebellious conditions may be. The requisites of perfect circulation are assured—cement is uniformly distributed around the casing and it centers accurately and positively.

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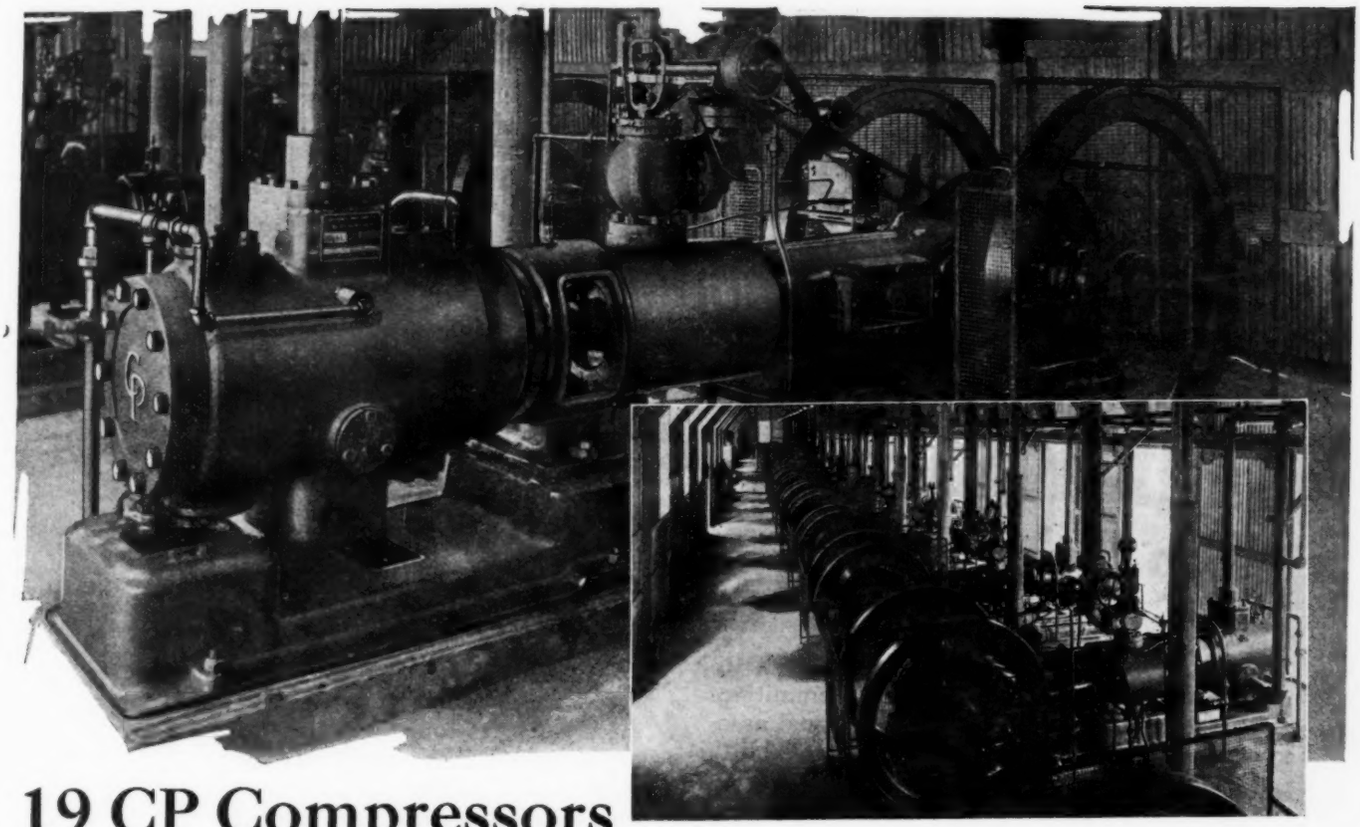

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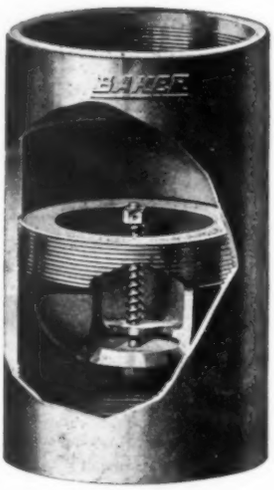

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The OIL WEEKLY

Edited Weekly at Houston, Texas — SPENCER W. ROBINSON, *Editor*

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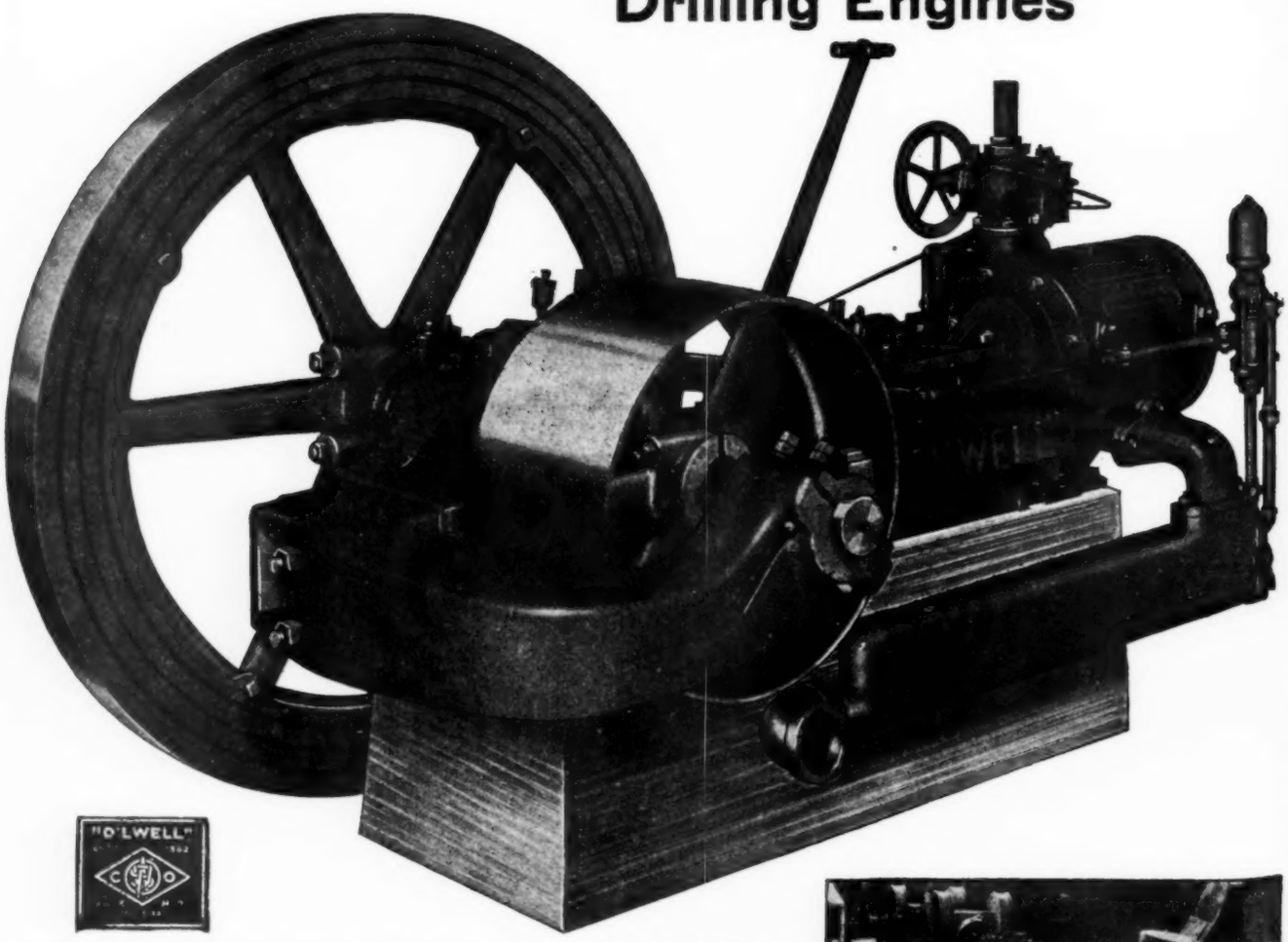

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EDITORIAL COMMENT

Curtailment by Legislation

NOW that the industry has apparently been unable to solve its own problems and curtail drilling, many leaders of the industry feel that state legislation legalizing agreements to curtail drilling will be necessary to take the industry out of the slough in which it has fallen.

While much has been said about the Federal Conservation Board and the help it can give, definite assistance which may be expected from the Federal Board does not seem to be particularly satisfying, because back of the Federal Conservation Board we have the Federal Trade Commission.

We recall that some six years ago when the industry was faced with a similar situation, although less fraught with danger than the present one, the Washington Office of The Oil Weekly communicated with the Federal Trade Commission to inquire as to what its attitude would be and was unofficially informed that if the Federal Trade Commission had any intimation of agreements which, either in intent or effect, violated federal anti-trust statutes prosecution would follow.

IT appears to us that if the industry cannot control the situation which has arisen (and we do not admit that it cannot) and which it is feared will be augmented by a possible drilling campaign in West Texas, proper state legislation does offer certain assistance.

The oil industry had just as well look that situation in the face because no state government is going to permit promiscuous agreements that will in effect, whether in intent or not, force the citizens of that state to pay an unreasonable price for petroleum products.

It would appear to us that the Oil and Gas Conservation Department in the State of Texas, which has taken the lead in such legislation, has proposed an admirable plan, insofar as such plans can go.

Under the plan of the proposed law for the State of Texas which was sponsored by Judge Bell, Supervisor of the Oil and Gas Conservation Department, agreements looking toward the curtailment of drilling cannot be put into effect until the Railroad Commission has passed upon them, nor can such agreements come before the Railroad Commission until all operators interested have agreed to submit the matter to the Railroad Commission, which in Texas controls the Oil and Gas Conservation Department.

IN this way the State through a duly constituted body maintains control of the situation and can prevent a monoply by refusing to sanction agreements on various occasions.

The Oil Weekly on Saturday of last week sent wires and letters to several oil men, and State executives, asking about their attitute on such legislation. This subject is covered by an article on another page.

The practical effect of such legislation is doubtful in our opinion. It is one thing to pass a law making possible such agreements and it is another thing to get all of the interested operators to enter into the agreements. We rather fear that there will not be a great many such agreements made because obviously if the oil industry itself is bent on drilling its head off, there will be many —any they will not be confined to small independent operators either—who will still insist on drilling where many will think drilling is unnecessary.

But in any event such a law as has been proposed in Texas can do no harm and as it may do some good, so by all means let us strive to effect such legislation.

TEXAS BILL ON CURTAILMENT AGREEMENTS

That part of the bill to be submitted to the next Texas Legislature that deals with agreements for the curtailing of drilling is as follows:

"It shall examine into and pass upon any and all agreements by persons, firms, associations or corporations owning or having an interest in oil or gas in any particular locality in this State, which such parties may submit to it, looking to the conservation of such natural resources and the prevention of waste thereof, or the prolonging of the life of the production thereof, by means of joint exploration development or operation of the properties concerned, or by fixing a program for the exploration, development or operation or safeguarding of such minerals. If said Commission shall find that the agreement submitted will promote conservation of such natural resources, will tend to prevent waste of either of them, or is in the interest of the public welfare, it shall approve same by an appropriate order made and entered of record, and the agreement so approved and the carrying out of same shall be lawful."

Expected Only Moral Support From Oil Board

Board sanction of curtailment agreements would avoid political complication

THAT the position of the Federal Oil Conservation Board as primarily that of an advisory board was recognized by Walter C. Teagle and W. S. Farrish when they presented the matter of present over-production to the board a few days ago, was the statement of W. S. Farrish, president of the Humble Oil & Refining Company in an interview with The OIL WEEKLY this week.

"We realize, of course, that the principal assistance that can come to the industry from the Oil Conservation Board in this period of over-porduction is largely the moral leadership and influence which the board certainly has," declared Mr. Farish.

"It is true," he continued, in answer to a question, "that nothing was requested of the board in our letter that cannot be done without the board's action, but the moral effect of sanction by the board would be of material value to the industry in trying to work out its present problem."

"Do you think that it would aid the situation if the Federal Conservation Board would pass upon proposed agreements to curtail drilling when such curtailment would obviously be in the interest of conservation," he was asked.

"It most certainly would, because in that event, the Federal Trade Commission would undoubtedly recognize the justice of such proposed agreements," Mr. Farish responded.

"PERSONALLY, I doubt if any complaint would be made now by the Federal Trade Commission against agerements to curtail drilling, even in flush pools," re continued, "but we might get in the position of having the action challenged as a political measure four or five years hence, unless the government through such a body as the Federal Conservation Board had passed upon it and had agreed that it was not in restraint of trade."

"If such procedure were taken by the federal government or by State governments, there would be no danger of a monopoly being created because such state or federal bodies as had in their hands the passing upon such agreements could call a halt at any time they thought it advisable," Mr. Farish observed.

"Our lawyers tell us that there are no statutes to prevent agreements on undrilled land—in other words, acreage before development of production has started," he said.

"But isn't it a fact," he was asked, "that any agreements, whether they be in a flush field or on wildcat acreage will contemplate only the control of the oil yet unproduced—not the oil already recovered, and in that event, is there any governmental objection to agreements even in flush fields?" he was asked.

"Logically, it would appear that until the oil has been brought above ground, there could be no objection, but some attorneys seem to think that there would be," he replied.

"DON'T you think that there is more to be hoped for from State action rather than from Federal action?" he was asked.

"Yes, I rather think that such is the case, although if the federal conservation board used its moral influence, I think that State legislation could be more easily accomplished," he answered.

"I believe that if State governmental bodies do take such action, the federal government will not interfere."

"Do you really think that State action permitting curtailment agreements (when such agreements are unanimous among the operators and other interested people, and when such agreements are not in restraint of trade,) would really be of practical help?" he was asked.

"Yes, I do," was the reply.

Asked to cite instances where unit control is actually in effect, Mr. Farish pointed out the agreement in Cherokee County, Texas, between the Humble and the Rio Bravo, the joint operations in the Pecos country between the Mid-Kansas and the Transcontinental, and joint operations on certain salt domes in the Gulf Coast country.

"IF the oil industry saddles the present situation on Seminole it will pay a penalty of a billion dollars for such foolishness this year alone," Mr. Farish declared. "Already the over-production at Seminole is costing the industry more than two million dollars per day."

However, Seminole is not the only cloud on the horizon, according to Mr. Farish. He thinks that West Texas can, within eighteen months, increase its production to 300,000 barrels a day, and thinks that with the stimulus of a profit price for crude the Texas Panhandle could be running 200,000 barrels per day by the end of the year.

OIL BOARD'S POSITION

THE following telegram has been received by The Oil Weekly from Secretary Work, in response to a wire sent him earlier in the week:

"The Federal Oil Conservation Board possesses no legal authority to fix or approve any plan concerning restricted production. Moral support can of course be given any proposal which is not in conflict with existing federal statutes, all of which are generally understood. The government is primarily interested in practical conservation of all natural resources and will encourage constructive policies which have this end in view. More wholesome cooperation within the industry looking to economical production will go far toward remedying some of the practices heretofore followed which failed to protect the smaller producers and consumers."

Hubert Work, Chairman,
Federal Oil Conservation Board.

Montebello Deep Test

Montebello, Calif. — Standard Oil Company is making a deep sand production test in the western edge of the old Montebello field. The test well is the Whitehead 1, now drilling at about 5200 feet. A light showing of oil was found at 5080.

The Montebello oil field was discovered about eight years ago by the Standard Oil Company which since that time has been the most active devloper of it.

Drilling is to start soon on the company's Stocker-Merced 1.

R. J. Scott, sales engineer for the Hercules Motors Corporation, with general offices in Canton, Ohio, now is located in Tulsa as Mid-Continent manager and is making his office at 1410 West Brady Street. John Krisl is sales engineer for the Gulf Coast and West Texas territories for Hercules Motors and maintains his headquarters at 2103 Sixth Avenue, in Fort Worth.

Opinions Differ on Advisability Of Seeking State Aid

Many leaders see danger in asking legislation as admission of inability to handle; some want permission to agree

EXPRESSIONS from several leaders within the petroleum industry were invited by The Oil Weekly early in the week, as to the advisability of proper state legislation looking toward the curtailment of drilling, when agreements on such curtailment had been passed upon by a duly constituted body.

Such procedure is in line with the report made by the Committee of Seven, appointed by the American Petroleum Institute last December, while no meeting has been held to adopt or reject the report of the Committee of Seven, there seems to be no doubt as to the stand which the Institute will take when such a director's meeting assembles.

Quite a difference of opinion exists among the men who responded to the invitation to state their position. On the part of some the fear exists that asking State governmental bodies to pass such laws is a dangerous admission of inability on the part of the industry to conduct its own business.

Pew and Guiberson

"Unit production, if practical of accomplishment and if carried on with the full conservation of gas and the reuse of gas through the sands would be ideal," declared Edgar Pew and S. A. Guiberson, Jr., in a joint telegram.

"I do not believe unit operation can be enforced on account of property rights, or if this were possible I do not believe the actual operations would necessarily cure the overproduction conditions such as now exist. Witness the situation at Braman, Oklahoma, where one company practically owns the entire pool. In my judgement the solution of the present and future troubles arising from these high peak periods of production lies in a thorough cooperation between the State conservation boards and the oil industry in making and enforcing adequate rules for the production of oil and gas to the end that the greatest recovery would be had and without waste of any kind, either oil or gas. If it is a fact, and I believe it is, that in most fields the recirculation of the gas through the sands will eventually result in a greater recovery of oil, then this should be compulsory on all operators. This would of necessity slow down all flush field productions and result in only a gradual and slow increase from such fields. The frequent high peaks of production would not occur and the gradual increase in production would be taken up by the increase in consumption. Both the public and the oil industry would be benefited by the stabilizing of production and by the greater recovery resulting. This would also prevent any large or small operator from doing excess drilling in any field at a time when flush periods of production existed in that field, as neither would be allowed to waste any gas and being compelled to put a large percentage of the gas back into the sand could not possibly take care of the gas produced from more than a limited number of wells during this period. If this were done all producers would be benefited by the economies practiced and the greater recovery of oil had. In a condition such as at Seminole where the gas is limited, the use of air for lifting oil should be prevented if possible by the authorities; and, if not, by the good judgment of the producers. There are only a few who receive any direct benefits from such practices and I question the benefits to them when considered in connection with their other large interests. A complete conservation of gas would, I believe, effectually cure the evils of overproduction and if this can be accomplished the entire oil industry will be benefited more than enough to justify all the costs necessary or the temporary disadvantages resulting, if any such did result. It would certainly give a value to the property of the average producer which he does not have a chance to obtain under existing conditions."

E. L. Doheny

"I have not read the recommendations made by The American Petroleum Institute nor the recommendations of the Federal Conservation Board on State legislation to aid unit production," wired E. L. Doheny, "consequently am not in a position to declare what my mental attitude might be towards such legislation. I am opposed both to Federal and State control of the industry in any way as being a dangerous precedent and might presage such interference as would deprive the industry of the benefit of the best judgment of those experienced company heads who are engaged in working out the problem of their various organizations. I would welcome, however, legislation, both Federal and State, which would relieve the various companies engaging in the industry from legal restrictions such as are imposed by the Sherman Anti-Trust Law, the Clayton Bill, the powers given the Federal Trade Commission, the Wright Act in the State of California, etc. These now hamper the companies in arriving at such understandings and agreements as would tend to overcome many objectionable phases of the industry, such as daily over production, under final recovery, the advantageous treatment of the crude product, problems of storage, etc., that are now engaging the attention of the industry. Oil men now feel that their heands are tied so far as making unfettered efforts to accomplish the greatest good along lines of proper conservation and cooperation for both the industry and the public."

E. W. Marland

E. W. Marland wired: "Legislation to make possible curtailment of production would have little value, because no producer wants to curtail his production. He wants to curtail the other fellow's. Legislation to enforce curtailment of production by preventing the waste of natural gas would have great value to the industry."

J. S. Cullinan

"Petroleum being a natural resource of vital necessity and importance to the army and navy for national defense, as well as the entire nation for heat, light, power, transportation and various industrial and domestic uses, governmental supervision for the conservation and regulation, if adopted, should fall under federal authority in conjunction and cooperation with the states and an organization dealing with both acting for and representative of the industry of the whole United States," declared J. S. Cullinan.

E. DeGolyer

"If what some of my friends in the oil business are telling me is true, it looks as though the oil man is either going to the penitentiary or the poor farm—and I understand that the fare at both places is nothing to talk about," said E. DeGolyer, president of the Amerada and the Rycade Petroleum Corporation, who was in Houston Monday of this week.

Mr. DeGolyer said that he was not particularly optimistic as to the effect of State legislation permitting, under certain conditions, agreements on drilling. He said that he was by no means opposed to such legislation—that it might possibly work out, but that he did not feel that the industry would take advantage of it.

E. J. Marston

"I believe the right to protect ones self from drainage is taken into consideration. I am heartily in accord with plans suggested," wired Edgar J. Marston.

Seminole Shutdown Starts Without Unanimous Approval

Open opposition expressed at Tulsa meeting. Several operators refuse to take part in deliberations

By GRADY TRIPLETT
Staff Representative

CALENDAR OF THE SEMINOLE SHUTDOWN EFFORT

PRODUCERS, after meeting in New York and Washington, named Ray Collins umpire of the Seminole district, charged with halting the drilling of any but necessary wells over a period of two weeks.

Producers meeting in Tulsa, May 12, fail to give this unanimous approval. Majority vote for it. A few refuse to vote. Other concerns not represented at meeting.

Officials of one concern openly oppose move and will not abide by it. Absence of some concerns interpreted to mean disapproval of the plan.

Present status is that concerns approving the move are submitting data to the field umpire as requested. No evidence of changed attitude on the part of others.

SEMINOLE OPERATIONS NOT INTERRUPTED

TULSA.—Development in the proven fields at Seminole is going ahead without any consideration from Ray Collins, umpire of the district through adoption of the New York resolution.

Collins is busy now collecting data for the next meeting of producers in New York. His attitude toward the whole Seminole area is that it will be impossible to check drilling within the proven pools. Instead he is collecting data through which he hopes to check the speed of drilling which might lead to the opening of still other pools.

The whole program at Seminole so far shows no hampering from the shutdown effort. Drilling continues at its usual rate. Completions are as numerous as before operators met here Saturday.

"THE industry has too many preachers; too many doctors. Some one is ever ready to rush into print.

"We are only going through one of our periodical depressions. We have seen others and we have seen conditions clear. That will be the case with this one. One of the worst I remember was in 1923. It looked then like conditions never would be righted. But it changed.

"So will this condition change. These companies are not going to pot and this industry is not going to ruin."

"Now is the time for us to keep our heads. There is no occasion for hysteria. I have seen the oil industry in worse shape and so have most of you."

Henry McGraw, President, before meeting of Seminole Producers at Tulsa, May 12th.

TULSA.—When relayed to the oil country, the New York plan for curtailing Seminole development met a reception as varied as it was interesting.

Seminole operators met May 12 in offices of the Mid-Continent Oil & Gas Association at the call of Ray Collins, drafted again as umpire for the Seminole area. He presentetd the decision of the committee of five in New York and asked for its adoption.

Adoption finally came, after a fashion. It lacked a lot of being unanimous, for several lease holders in Seminole declined to treat the whole matter with sufficient seriousness to be present. Some voiced objection during the meeting, placing themselves on record as opposed to the plan and giving warning of not complying with its provisions.

Here is the resolution, so adopted, as drafted by Dana H. Kelsey, vice president of the Prairie Oil & Gas Company:

"Resolved, that this meeting of Seminole producers indorse in principle the suggestions contained in the telegram received by Ray H. Collins from the New York committee of producers, with reference to the curtailment of drilling in the Seminole area, and pledge our earnest co-operation in an endeavor to shut down unnecessary wells in a manner that will be fair and equitable to the respective property owners."

Second Meeting May 25

The telegram, adopted by this resolution, was brought before the body by Mr. Collins. It came from New York, being the result of conferences there and in Washington. The telegram named Collins as umpire of a shutdown of two weeks duration, during which no new wells were to be started, except with his approval. Another meeting is scheduled for May 25.

The conference here ended when Collins said the rulings would take effect at noon May 12. He asked all producers to submit data on all wells drilling and all wells contemplated. The area included in the curtailment program is 20 miles square, running from township 7 to township 11 and from range 3 to range 7. It includes the Seminole, Searights, Earlsboro, Bowlegs and Pearson Switch pools, as well as wildcatting operations within the area.

The meeting was open to the public and to the press. The question of allowing writers of the trade papers to remain came up first. A vote was called, one man voting for the press and another against. John H. Brennan, counsel of the Barnsdall Oil Corporation, then made a plea that representatives of the newspapers and oil journals be present.

For a time the meeting was as tame as a lawn party back in the romantic nineties. The plan was outlined. But lack of open opposition betrayed the fact that some present were not in accord.

It was not until E. H. Moore, president of the Independent Oil & Gas Company, voiced his sentiments on the subject that full expression came about. Mr. Moore said:

"When there were only six or eight companies in control in Seminole, it presented an ideal situation for regulation. We met repeatedly and tried to work out a program. There was no whole-hearted spirit in those meetings. There is none here now.

"Really we have nothing in mind. This suggestion from New York offers nothing concrete. It looks as hopeless now as it did a few months back.

"What we are headed for is some sort of governmental regulation. Our actions past and present are evidence we can not control conditions ourselves.

"Personally I would be glad if something could be done. But it looks like a hopeless effort now. We could make no progress when there were fewer companies and fewer wells. Conditions in the field are worse now and our attitude is no different. It would have been better for the industry if Seminole had never been discovered."

Mr. Moore later voted in favor of the resolution, which puts the umpire in charge for two weeks, with another meeting to be held May 25 to determine further action.

A Drastic Challenge

John H. Brennan, counsel of the Barnsdall Oil Corporation, then offered a plan,

U. S. Board Proffers "Advice and Counsel"

Teagle and Farish offer Suggestion for drilling control to President's Oil Conservation Board

By CLARENCE L. LINZ
Staff Representative

WASHINGTON, D. C.—Prompt assistance in meeting the emergency caused by continued overproduction of oil, asked of the Federal Oil Conservation Board by Walter C. Teagle, president of the Standard Oil Company of New Jersey, and W. S. Farish, former president of the American Petroleum Institute, is likely to meet with little but "advice and counsel," it was indicated by officials here last week, while in New York leaders of the industry were seeking some solution of their problem.

Asked by the two oil executives to give consideration to some means of averting future overproduction, with the recommendation that thought be given to a plan whereby, instead of acreage in new developments being sold, interests in the project be offered, the operation to be managed for the joint benefit of all interest holders and only such wells drilled as were necessary either to prove the land or meet the demand for oil, it was pointed out by Secretary of the Interior Work, chairman of the board, and Secretary of the Treasury Mellon, that the government is so hedged in by laws and regulations that little concrete assistance can be given.

Making public the letter from Mr. Teagle and Mr. Farish, Secretary Work pointed out that "the government's position relative to overproduction evils, the necessity for avoidance of waste, and actual conservation of petroleum in the ground, is clearly stated in the report which was submitted by the Federal Oil Board to President Coolidge last September.

"More than two years ago when the President created this board to counsel with the oil industry 'in the interest of the government and the industry alike,' the thought was expressed by certain elements in the oil world that there was no overproduction and no danger of such a menace; that the industry would be able to better meet its own problems if unhampered by Federal suggestions. But after painstaking efforts and one of the most intensive surveys ever made by any agency of the government, the President's board pointed out the prevalence of certain existing and potential evils. To the credit of the industry, it may be said, these menaces were readily acknowledged and immediately steps were taken by the greater portion of the industry to observe as far as possible some of the suggestions which this federal board advanced.

Laws Interfere

"The present plight of the industry is recognized fully by this board, and I feel that the leaders of the oil world now realize that the government is ready and willing to assist in every proper manner to meet the crisis. There are certain federal statutes which, of course, govern, as well as the police laws of the several States and other local acts and regulations which can not with impunity be brushed aside, even in an emergency. But the Federal Oil Board will be glad to counsel and advise with the industry and do everything within reason and the scope of the law to assist."

There is nothing the board can do, it is believed by Secretary Mellon, as any action to help the situation would involve restrictions on drilling, which must be controlled by State laws. In his opinion, however, such legislation is a long way off. The federal government cannot interfere in the situation, involving, as it does, delicate questions of constitutional law regarding the rights of private property owners.

Any action toward curing the situation must be taken by agreement between producers on some basis which would eliminate rush drilling in new pools.

Overproduction of crude oil "has recurred this year in a form so malignant as to seem to be without precedent in all past history," the board

Officials Decide on Curtailment at New York Meeting

New York.—Following the meeting in Washington last Monday between Secretary of the Interior Work, chairman of the Federal Oil Conservation Board, and Walter C. Teagle, president of the Standard Oil Company of New Jersey, a meeting of producers interested in curtailing drilling was called for last Thursday in Mr. Teagle's offices here.

A statement issued from this meeting was as follows:

"The condition of overproduction of crude oil at the present time is not a local situation, existing in any one particular district, but general, applying to Oklahoma, California and Texas. At the moment, what is known as the greater Seminole area is attracting the greatest attention. Were it not, however, for the fact that in California and West Texas production is in excess of current consumption, and oil is going into storage, it is probable that the overproduction represented by the Seminole pool in Oklahoma would have been absorbed by the industry without undue disturbance.

"Overproduction is the direct result of too much drilling and, therefore, any constructive program must deal first with the cause of overproduction, i.e., the present drilling activities. Those present at the meeting, while owning the bulk of the production at Seminole, realized fully that the question of overproduction from the standpoint of conservation of our natural resources and the economic utilization of oil products was general rather than local, and that any comprehensive plan looking to an amelioration of overproduction would not be effective if applied only to Seminole.

It was the consensus at the meeting that in so far as Seminole was concerned any program adopted must be a part of the more comprehensive plan which would apply in all producing areas in which there is a prospect of large new development. Therefore, a committee consisting of W. C. Teagle, A. L. Beaty, G. S. Davison, Henry Dawes and R. W. Stewart, was appointed to confer further with the Federal Oil Conservation board to develop if possible a plan of procedure which

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was told in the letter from the two oil men, which, in full, was as follows:

"Honorable Hubert Work, Chairman
Federal Oil Conservation Board,
Washington, D. C.

"My dear Mr. Work: Overproduction of crude oil, that bugaboo of the oil producer which has so often and so violently harassed the petroleum industry of the United States, has recurred this year in a form so malignant as to seem to be without precedent in all past history. And again with equally unprecedented earnestness the producers have renewed the old debate as to how best these recurrent attacks may be avoided or their ill effects diminished. Overproduction is like the weather, everyone talks about it, but no one has ever really done anything about it.

"The opening paragraph of President Coolidge's letter creating the Federal Oil Conservation Board says:

" 'It is evident that the present methods of capturing our oil deposits is wasteful to an alarming degree in that it becomes impossible to conserve oil in the ground under our present leasing and royalty practices if a neighboring owner or lessee desires to gain possession of his deposits.'

"In the original report made by your distinguished board there appears the following:

" 'Another avenue of relief is the restriction of development or operation through voluntary agreement of owners. This suggestion is not novel for it has to a limited extent been tested in actual practice and can be discussed in the light of experience. Agreement between neighboring property owners as to the handling of their common property and the protection of their mutual rights is more and more generally recognized as making for economy in development and efficiency in extraction as compared with competitive drilling. Indeed, operators of experience have expressed to the board the opinion that duplication in drilling and the consequent unnecessary reduction of gas pressure constitute the cause of all waste worth mentioning in the production of oil. The danger that much of the remaining oil will be brought to the surface before either courts or lawmakers can be expected to remedy the situation has also promoted the expression of opinion to the board that voluntary co-operation offers the only practical hope.

" 'The voluntary co-operation proposed would need to include the landowners and operators in a single field or pool, which is a relatively small unit of production, so that the possibility of monopolistic control need not be feared. Indeed, co-operative regulation of either the development or the operation of a single pool could control only a small percentage of the country's production.'

Too Much Oil In Sight

"An effort to create ground reserves and limit unnatural, forced competition in the production of oil from a pool once discovered is certainly warranted in the present situation and any such effort would seem to be directly in line with the views expressed in the foregoing extract from your own report. The current situation has unquestionably brought home to all more forcibly than ever before the economic folly of taking from its natural storage place in the ground more oil than is necessary to meet the actual market demands. By continuing month after month to find and bring to the surface more oil than is needed the producers have brought about a situation where crude and its products are sold at a price definitely below their average cost. Moreover, when one looks into the immediate future one finds so much additional impending overproduction, so much oil in sight as to make further consideration of the matter at this time by your board of much greater public moment than at the time President Coolidge created the Conservation Board.

"Many possible remedies for these ills have been suggested. Some believe that the only solution for overproduction is that the price of all crude oil wherever produced should be reduced at the first evidence of approaching overproduction to a point where even the owner of large, flush oil-producing properties will hesitate to drill more wells. Others believe that what is termed settled production; that is, the oil from wells in old fields where relatively the volume of oil per well is small and costs are high, should always bring a reasonable price, but at the same time that prices in flush new fields where wells are gushing forth large volumes of oil at low cost ought, under the law of supply and demand, to be cut to the bone. A number of well-informed students of overproduction have proposed that the police powers of the State be invoked to prohibit all waste of natural gas, thereby making it impossible to bring new fields rapidly up to peak production, since most large gusher wells can not be allowed to flow unrestrained without the attendant escape of gas into the atmosphere. Still other observers maintain that the problem of overproduction would be solved if the purchasing companies were to refuse to purchase more oil than they need and prorate their purchases among the various producers in each offending field. All these and other measures are proposed and advocated by various authorities. There are serious obstacles in the way of each proposal and there is no unanimity of opinion as to which course will best meet the situation.

"Irrespective of present conditions the wildcatter continues to find more oil, bringing it upon the market regardless of the real need for oil. It is the latter part of the operation which is most injurious; that is, the real harm comes from forcing the oil onto an already glutted market. The wildcatter is a vital factor in the industry but once oil has been found the interests of the industry and the country as a whole lie in keeping it in the ground until the market requires it. The difficulty is that the whole principle on which the present wildcatting effort is based makes it inevitable that the oil shall come onto the market immediately following discovery.

Competitive Drilling

"To illustrate this pernicious principle and its operation, consider a typical wildcatting enterprise under current operating practice. X secures a tract or a group of tracts of land, large or small in the aggregate as conditions indicate, upon which he decides to drill a test well. He may believe or hope, or suspect that oil is to be found beneath the surface, but he may also be entirely indifferent as to the real prospect for oil, because the wildcatting principle in question permits him to make money regardless of the outcome as to oil. Furthermore, X may be either an individual, experienced or inexperienced in the business of producing oil, or a recognized oil producing company, engaged solely in that business. Whether an individual or a company, therefore, X proceeds to set aside a small part of his holdings upon which he undertakes to drill a well and to sell a separate lease on a specified fraction of the remainder of his tract to each of four or six or a dozen other individuals or companies. In this respect, large companies have been the worst offenders, since they, rather than individuals, buy most of this so-called off-set or protection acreage around wildcat wells. The aggregate sum received by X is usually large enough not only to pay the entire cost of his original lease and his well, but also to yield him a profit; hence the assertion that he need not really be concerned with the actual finding of oil.

"When a discovery is made in a well drilled in a venture of this sort, the immediate and inevitable result is a rush of drilling effort. Every leaseholder in the original block attempts to get wells down on his particular lease and to produce as much oil as possible from it before the neighboring lease owner can take the same oil out through wells on the adjacent lease. Oil, of course, knows no owner until it is reduced to actual possession on top of the ground, and as long as it is under ground it moves to the nearest well through which it can escape, regardless of where lease boundaries may fall on the surface of the ground. Thus every lease owner is driven, in self defense, to produce as much oil as possible from his wells before it gets away through the wells of his neighbors or before pressures fail and the oil is locked in the gas depleted reservoirs. The direct consequence is that the whole oil pool is drilled as rapidly as

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Gas Men Would Cooperate With Oil Producers

N. C. McGowen, new president of Natural Gas Association, and other speakers talk on conservation and use of gas supply

By Special Representative

CINCINATTI, Ohio,—In an argument plea for more cooperation between producers of oil and gas to prevent the waste of these fuels in the fields, N. C. McGowen, newly elected president of the Natural Gas Association of America, speaking before the meeting of the Association here this week, declared that a well spacing plan, as well as agreements not to drill too deep, should be worked out.

To back up his arguments, the speaker cited an instance of a southwest gas field which had an estimated recoverable reserve of 100,000,000,000 cubic feet. Six wells were completed when oil was discovered. The oil was saved, but the gas went up into the air, in spite of the fact that a pipe line had been built. Of $4,000,000 worth of gas only $40,000 worth was recovered.

"I cite this," Mr. McGowen stated, "to show the necessity for the closest cooperation between the producers so that when oil and gas are found at the same horizon, some plan can be worked out to recover and market both.

He continued, "In a new field, where gas is discovered, if some plan could be worked out with the owners of the leases to prevent the unnecessary completion of gas wells that must be closed in, because of the lack of market or pipe line facilities, the owners of the leases would eventually benefit to a greater extent by allowing a market to be developed, facilities put in and then carry on drilling operations to meet the demands of the market rather than developing a large amount of open flow out of proportion to the reserve of gas in the sands, thereby giving the impression to the public of the great amount of gas that should be had for almost nothing.

"To correct this impression, it is going to take the closest co-operation between marketing companies and producers. We are all aware of the fact that the best place to store natural gas is in the ground, and it is not an economical operation to drill two wells where one will eventually drain the gas from the sand. A well spacing plan, as well as agreements not to drill too deep, should be worked out. Experience has shown that the sooner each operator realizes that to conserve a field, there must be cooperation, the greater amount of gas can be recovered.

Mr. McGowen was one of many speakers to appear before the gathering, and all the addresses had much of interest in them to the gas fraternity.

In his address, the retiring president of the Association, Ralph W. Gallagher, gave interesting figures concerning the gas industry. He stated that more than a trillion feet of gas is consumed each year in the United States, that there are more than 3,500,000 consumers who use gas as a fuel, and that the value of the gas consumed is more than $265,000,000.

N. C. McGOWEN,
Elected President of the Natural Gas Association of America.

Mr. Gallagher also outlined activities carried on and sponsored by the Natural Gas Association, dwelling at length on the test laboratory established by the Association in conjunction with the Bureau of Standards and the Bureau of Mines, for the purpose of eliminating hazards of carbon-monoxide poisoning and raising the standards of gas appliances."

R. M. Conner, director of the testing laboratory of the American Gas Association, Cleveland, Ohio, pointed out that "Any movement which affects the safety and welfare of approximately 52,000,000 people cannot be minimized either from a commercial or altruistic standpoint. If the laboratory can accomplish the purpose for which it was intended, the gradual elimination of cheap and inferior types of appliances, elevation of the standards of gas utilization, the reduction of competition from other fuel sources and increases of our product's usefulness, it should, in the end, prove not only helpful, but a distinct and valuable contribution in insuring the future success of our business."

J. D. Creveling, of Henry L. Doherty and Company, New York, spoke of the great waste of gas through line leakage and outlined methods used by his company to reduce this waste.

Frank M. Brewster, a representative of the Petroleum Reclamation Company, Bradford, Pennsylvania, stressed the need for further efficiency in oil and gas recovery methods.

He pointed out that the United States has produced 9,500,000,000 barrels of oil and there remains in the reservoir rocks from 38 to 85 billion barrels awaiting newer and more efficient methods of extraction.

Since nature's own propelling forces have been found wanting, it is left to man to provide more efficient propulsive agents.

Gas in Oil Production

Natural gas, according to Mr. Brewster's quotation of Daw and Calkin's finds, is about four times as soluble in crude oil as air. Therefore, Mr. Brewster figures, it would be necessary to use about four times as much gas as air to get the same propulsive force. These two agents are the effective ones, said Mr. Brewster, in the more efficient recovery of oil.

A. W. Leonard, of Tulsa, in a later discussion of Mr. Brewster's paper commented as follows:

"As far as I can find," said Mr. Leonard, "there is no exact data as to the amount or average amount of gas or air required to produce a barrel of oil." The 400 cubic feet named by Mr. Brewster was thought by Mr. Leonard to be "not practical when competing with your neighbor and back pressure must be held then."

Mr. Brewster suggests that a combination of air and gas would probably make

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Use of Air and Gas in Oil Recovery

Paper presented before the annual meeting of the Natural Gas Association of America at Cincinnati

By *FRANK M. BREWSTER*
Petroleum Reclamation Company, Bradford, Pa.

THE economic life of oil fields vary but all eventually reach a point when they are no longer profitable to operate by the ordinary methods of production, except when practiced under the strictest measures of economy. But this does not mean that the oil is exhausted. There remains in the sand at least four times as much oil as has been produced.

This country has produced about nine and one-half billion barrels of oil and there remains in the reservoir rocks from 38 to 85 billion barrels of oil in known fields that awaits newer and more efficient methods of extraction. Present methods of extraction are very inefficient. It has been left to nature to supply the propelling force, natural gas. But nature has stored a limited amount of gas per barrel of oil and the gas dissolved and associated in seven or more barrels of oil is necessary to produce one, thus leaving seven or more barrels of oil in the sand that is dependent on gravity or other outside forces to propel it to the hole. Even this dissolved and associated gas is not utilized to the best advantage as it is estimated that the ratio of gas to oil produced is more than 4000 cubic feet per barrel of oil. This same oil could have been produced under proper engineering practice, with about 400 cubic feet of gas per barrel of oil or about a tenth of the energy actually used.

Propulsive Agents

Gas is the most active agent in the expulsion of oil. The sand immediately surrounding a well will get the benefit of maximum pressure and needs it least while oil at a distance will have to move under a reduced pressure during the latter period of extraction. There is also the probability of the gas associated with the distant oil escaping through the depleted parts of the sands in the vicinity of the well without doing useful work. Hence the areas near the well are more completely drained than those at a distance.

It is evident that a propulsive agent must be introduced into the sand to move this relatively dead oil to the hole. The most feasible method of restoring these forces appears to be the forcing of gases into the oil sands. Air, natural gas or a combination of both are the only gases that are available in large quantities and at small cost. Other gases, such as flue gas, carbon dioxide and manufactured gas might be used but as yet they are too costly.

The use of gases does not remove all the oil and no practice should be employed that will waste or preclude the recovery of the oil remaining in the sand after these newer methods have served their purpose. Unless further investigation and research disprove the practice it appears that the pumping of air, natural gas or a combination of both will accomplish the desired result of increasing the recovery and still leave the sands in such a condition that they can be further exploited by newer discoveries and better methods.

Dissolved Gases

Natural gas under pressure will dissolve in oil, increasing the gravity and volume and decreasing the viscosity of the oil. Movement of the thinner oil can be effected with less energy and greater quantities of oil can be recovered. But this is offset to a certain extent by a tendency for the gas not in solution to break through the thinner oil and by-pass it without doing useful work. Also a gas in solution no longer has any propelling force and must be replaced with other gas to propel the oil to the hole. Dow and Calkin[1] found that natural gas was about four times as soluble in crude oil as air. Hence in using natural gas it will require about four times as much of gas as it will of air, to get the same propulsive force. The gas in solution will break into a gas under reduced pressure but this reduced pressure is not encountered until the oil and gas have moved to within a very short distance of the producing hole and the expanding gas does very little work in bringing oil to the hole.

Effects of Air on Oil and Sand

Air, being only slightly soluble in crude oil, is exerting its propulsive force throughout its travel through the sand. However air oxidizes most oils to a greater or less extent and increases their viscosity and lowers their gravity, although the gravity has been increased in several Oklahoma installations. This may have a very detrimental effect in paraffining or gumming the pores of the sand. However the carbon dioxide generated may offset this effect as carbon dioxide is very

[1]D. B. Dow and L. P. Calkin "Solubility and Effects of Natural Gas and Air in Crude Oil." Bureau of Mines Serial No. 2732.

ATTENDANCE AT THE TWENTY-SECOND ANNUAL MEETING OF

soluble in crude oil and lowers its viscosity and increases its gravity.

The Use of Gas Mixtures in Recovery

A combination of air and gas would probably make a better medium for propelling oil than either one used separately. The gas dissolved in the oil would reduce its viscosity, offset the oxidizing effect of the air and make the oil easier to move while the air would remain in a gaseous state and propel the oil to the hole.

Using a mixture of natural gas and other gases, such as flue gases, coal gas, etc., is desirable to eliminate explosions and to reduce the viscosity of the oil. Flue gases consist mostly of carbon dioxide and nitrogen, which makes a very good combination. The carbon dioxide would dissolve in the oil very readily, reducing its viscosity and making the oil easier to move by the nitrogen which has very little if any effect on the oil, except as a propulsive agent.

However, there are two objections to the use of flue gas. First acid is found in the flue gas and must be removed by proper scrubbing to prevent the rapid corrosion of transmission lines. Second, the return gas from the producing wells may soon become so diluted with noncombustible gases that it cannot be used for fuel.

Coal gas would probably be as satisfactory as natural gas as a propulsive agent and would not be as objectionable as a noncombustible gas. However, it would require scrubbing to remove all tars and gummy substances that might plug the pores of the sand.

Disposal of Gasoline Produced

Either gases or air are capable of carrying gasoline vapors. The carrying power of all gases is the same.[2] Hence air is just as good as natural gas for carrying gasoline vapors. The dry gas or air as it moves through the sand keeps picking up more and more gasoline vapors and becomes richer in its gasoline content. Most of this gasoline is knocked down during compression and cooling of the gas. It is a valuable by-product and may be sold as casinghead gasoline or put to many uses such as, mixing with heavy crude to raise its gravity, a fuel in internal combustion engines, a solvent for dissolving paraffin off the walls of the hole in both intake and producing wells, or lubricating it down intake wells and recycling through the sand. The latter appears to be the most logical method for its disposal. The high gravity gasoline should cut paraffin deposits, lower the viscosity of the oil and act as a leaching agent for cleaning the sand of all oil.

Explosions and Hazards in Using Air-Gas Mixtures

If an air-gas mixture is recycled through the sand it will produce gasoline in the same manner as natural gas and in like quantities for all gases have the same carry power for gasoline vapors. However, it must be remembered that air-gas mixtures are explosive within certain limits while certain limits have been found for explosive mixtures[3] of air-gas under low pressure, it has not been demonstrated that these limits will hold the same or even in direct ratio under high pressures. Even if definite limits were known and established for air-gas mixtures under high pressures it would not be safe to assume that the gas was constantly of uniform mixture. Diffusion of gases takes place very slowly in the sand and also in the pipe lines resulting in mixtures of varying quantities of air and gas at irregular periods. Pumping wells vary in the quantity of air-gas mixture and gasoline vapors given off during their pumping period, increasing in both as the fluid head is lowered.

Therefore air-gas mixtures should be handled at all times as if they were explosive mixtures and all precautions taken to prevent or at least check the extent of any explosion.

Methods for Preventing Explosions

Lightning arrestors or baffles made of steel shavings, small pipes and other cooling devices copied after the principle of the miners safety lamp have not always worked. It has been assumed that burning gases would be cooled below the ignition point in passing through them and it is reasonable to expect this to be a fact but it is highly probable that after an explosion has taken place, the arrestors function as a highly developed burner, supplying fuel to the burning gases on the low pressure or explosion side of the arrestor. This would result in an intense heat at that particular point and by conduction would soon heat the arrestor hot enough to ignite the mixture behind it. So it seems very probable that a series of explosions follow after ignition at some point in the high pressure system. If this is true the extent of any explosion would not be confined between arrestors but would travel in the direction of the air-gas supply which would be toward both the compressor and the intake well if the explosion burst the line and no checks were on the line or wells to prevent gas from feeding back from the sand into the line.

Air-Gas Slugging

A method of inserting a non-flammable gas or pure air slug between air-gas mixtures has been used. This is accomplished by an automatic valve on the suction side of the compressors or gathering system. This valve alternately passes a quantity of air-gas mixture and then a quantity of pure air thus putting a slug of non-flammable gas between mixtures of air-gas.

This system will not prevent explosions but it should confine the explosion to that particular air-gas mixture in which it occurs as it will be separated from other air-gas mixtures

[2]Burrell, G. A., "Hazards in Handling Gasoline." Technical Paper 127, Bureau of Mines, 1915.

[3]G. A. Burrell and I. W. Robertson, "Effects of Temperature and Pressure on the Explosibility of Methane-Air Mixtures." Bureau of Mines Technical Paper, No. 121, 1916.

G. A. Burrell and Alfred W. Gauger, "Limits of Complete Inflammability of Mixtures of Mine Gases and of Industrial Gases With Air." Bureau of Mines Technical Paper No. 150, 1917.

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by a slug of non-flammable gas. Aside from the dangers of using pure air or a gas-air mixture for restoring pressure there is the problem of confining this mixture to a certain lease or leases, especially if the adjoining property produces gas for domestic and industrial uses. The movement or direction of flow of any gaseous substance cannot be absolutely controlled from the surface. Any gas that is non-flammable should not be used adjacent to a property that utilizes the gas for fuel purposes unless there is a barrier to gas movement between the two properties. If air becomes mixed with this fuel gas it may cause a serious and disastrous explosion in the distributing system or if a non-flammable gas, such as carbon dioxide or nitrogen is mixed with this fuel gas the fires may go out and cause asphyxiation or an explosion when flammable gas follows the slug of non-flammable gas.

Effect of Structure on Recovery

When gases are forced into a sand they follow the line of least resistance, frequently following the coarser or big pay streaks, if no such streak is present air or gas will tend to follow the higher parts of the structure or the top of the sand, while liquids will tend to follow the lower part of the structure or the bottom of the sand. Air and gas tend to rise to the top of the structure while liquids will seek the lowest level. Hence it is advisable to locate the air or gas intake wells on top of the structure as there is less resistance to the movement of air or gas through a partially or wholly depleted oil sand and production can be effected quicker than by forcing the oil up through this depleted sand. Another serious factor affecting the choice of inlet and outlet well locations is that when oil is forced or permitted to enter a dry or partially depleted sand some of this oil is lost. The practice of forcing oil from the bottom or flanks of a structure up through a dry or depelted sand is a serious waste. For every barrel of oil produced in this manner there is left in the dry sand three or more barrels of oil that cannot be recovered by any process now known except mining. For these reasons air or gas intake wells should always be located higher on the structure than the producing oil wells and in no case should oil ever be produced through a gas or dry sand.

There has been an erroneous impression throughout the Appalachian field that oil and gas did not conform to structure regardless of the fact that Mr. I. C. White conceived and proved the anticlinal theory in West Virginia many years ago. Detailed subsurface mapping[4] shows that accumulations of oil and gas in many of the Eastern fields conforms to structural conditions in the reservoir rocks. The restriction of oil and gas production to anticlines is especially notable in the sands of the lower Mississippians beds and those of the Cemung formation. In certain areas the sands of the Venango group of Catskill age are definitely known to be oil saturated in synclines although there is excellent evidence to show that the limits of oil production in fields which produce from this group of sands is due to lithologic changes in the reservoir rock rather than to structural conditions.

Selection of Intake Pressure Wells

Wells having large initial and flush production undoubtedly have more completely drained the sand in their immediate vicinity because of having utilized the high initial gas pressure from areas beyond their radius of oil drainage. Wells of smaller initial and flush production were frequently the wells that were drilled after the wells of larger production had been drilled and if sand conditions were fairly uniform they would have been just as large if the original gas pressure and volume had not been depleted by the first wells drilled. Hence there is probably more oil in the immediate vicinity of these smaller wells than near the larger wells that have more completely drained their areas.

Therefore, it is advisable to make the wells of larger initial production the intake air or gas wells and have less distance and resistance to force the oil that is nearer to the adjoining wells that originally had a smaller initial and flush production.

From a study of production decline curves and sand conditions in conjunction with pressure recovery it appears that a greater recovery can be expected from wells showing a long gentle decline. Wells having a sharp or steep production curve will not respond so readily to air or gas pressure. Such wells should be made intakes. Wells drilled into tight sands are ordinarily very small producers. This is the result of the great amount of resistance that the very small pores of a tight sand offer to any fluid moving through them. Such wells should be made air or gas intakes as it is too much to expect them to ever be anything but poor producers.

In old fields where no records are available, or in fields having a low initial gas volume and pressure, or where the initial and flush production were about the same for all wells it is a method of trial and error to find the best wells for taking air or gas and the best wells for producing.

Reversing the direction of flow of either the oil or gas and air has no detrimental effect on the sand or on recovery as long as the oil is not forced into a dry sand. Gas and air tend to squeeze the oil down into the bottom of the sand with a resultant movement of the oil in a direction toward the bottom of the sand in the producing well.

Preparation of Intakes

In preparing a well for taking air or gas or a combination of both it is advisable to thoroughly clean the well of all sand, cavings and other debris that might plug up the pores in the sand. A newly drilled well has the advantage over an old well in that the walls of the hole are clean and the pores are not plugged with paraffin, muck, etc.

All intake wells should be cased or tubed to the top of the oil sand and any open hole below the oil sands should be plugged back, especially if any sands below the oil sands are exposed. Otherwise the gas or air may migrate into other sands above or below the oil sand and escape without doing useful work. Producing wells should be prepared in a like manner, as the air or gas will migrate into other sands, especially if any back pressure is held in the well. But the loss of the air-gas mixture after it has done its work is not the most serious possible loss as it may open up passage ways that will dissipate the pressure and may carry gasoline and oil into sands and reservoirs beyond the reach of any recovery system. Both intake and producing wells require careful preparation for pressure recovery methods.

Cleaning Out

In the past it has always been necessary to clean out at infrequent intervals to keep wells producing. This is just as essential with the newer methods of recovery, and is imperative where the formations are soft and subject to caving.

The expense of cleaning out is offset by the greater quantity of air or gas that can be forced into the sand and possibly at lower pressures due to less resistance. The producing wells are usually affected by the increased flow of gas and oil under high pressures. The walls cave, sand and muck are forced off the walls causing frequent pulling of rods and tubing unless the wells are thoroughly cleaned before the pressure hits them. The expense of cleaning is compensated for by increased production and less pumping trouble.

Cleaning out by cable tools is commonly slow and expensive. The quantity of surface equipment such as derrick, machinery and tools that have to be moved, erected and torn down in addition to the slow process of cleaning out makes the cost of this method of cleaning out almost prohibitive. But in some cases where back pressures have to be held on the formations at all times to keep them from caving, cable tools solve the problem very nicely. By means of a fluid head any

(Continued on page 40)

[4]Paul V. Torrey, Assistant Petroleum Geologist, U. S. G. S. Personal communication, April 18, 1927.

Seal Beach Production Takes Downward Trend

Rate of decline in face of number of good completions taken as indication of peak reached

By WM. V. GROSS
Staff Representative

LOS ANGELES, Cal.—From indications of developments during the past week, the townlot portion of Seal Beach seems to have reached its production peak. Whether the rapid decline of wells in this sector of the field will be of sufficient volume to prevent any increase in production from the field as a whole is problematical. A signal decline on the part of townlot wells is apparent.

During the week ending May 14, Seal Beach production showed a 5325 barrel decrease, the daily average production falling to 58,560 barrels despite addition of more than 15,000 barrels of flush coming from the week's 13 completions. From the looks of things, the townlot portion of the field promises to be an economic fiasco, and only those whose acreage permits conservative development will be the money makers.

While part of Seal Beach, such as portions held by the Marland, Standard and Associated, promise to be of great ultimate value because it will allow conservative development, the remainder presents a situation strikingly similar to that of Los Cerritos extension of Signal Hill. Figures were gotten out about three months after Los Cerritos' production had begun to decline showing that about 8 per cent of the operators came out with a financial gain and that about 12 per cent of the wells were worth while commercial propositions.

Yet, it has been pointed out that prospects of a deeper sand at Seal Beach are good, and as the area has manifested a capacity for upsetting the "dope," it may develop into something entirely different from Los Cerritos.

Some idea of the individual well behavoir at Seal Beach for the past month may be gotten from a study of the following table showing the total daily production for the field, the number of producers and the average production per well:

Date	Prod.	No. of Wells	Av. Prod. per well
April 16	34,850	27	1,331
April 23	42,750	29	1,474
April 30	59,645	36	1,656
May 7	63,885	40	1,597
May 14	58,560	52	1,126

It will be seen from the above that, beginning sometime during the week previous to the present high mark of production at Seal Beach, the individual well yield began falling. The rate of decrease has been unduly accelerated by the number of completion since then, considering the average healthy initials of the new wells. Remembering the yet youthful character of Seal Beach, the operators had a right to expect this past week's flush to add to the output, and as the daily production slumped, there is keen disappointment among those developing Seal Beach.

During the seven day period ending May 14, there were added to Seal Beach's list of producers 12 new wells and one workover, having an aggregate initial estimated at 15,895 barrels, or an average initial per well of 1222 barrels. As the average initial per well for the field to date is in excess of 1800 barrels, behavior of this week's completions does not compare favorably.

Associated Oil Company's Hellman 3 was brought in for an estimated 795 barrels of 23.1 gravity oil from 4455 feet. The well, which has a tubing pressure of 80 pounds and a casing pressure of 325 pounds, carries 89 feet of 200M Emsco in the 131-foot liner which was landed on bottom. Completion of Hellman 3 gives the Associated a daily recovery of 10,375 barrels at Seal Beach coming from eight producers.

California American Oil Company brought in its No. 1 well for an estimated 1000 barrels at 4785 feet. This well formerly was the property of the Italo-American Oil Company.

The California Petroleum Corporation, added a fourth producer during the week with completion of Alamitos 2, a 565-barrel producer at 4668 feet. Alamitos 2 landed 8¼-inch casing at 4635 feet and is producing 27.1 gravity oil with a casing pressure of 700 pounds and a tubing pressure of 640 pounds. The company's production is 2395 barrels per day.

Although the General Petroleum Corporation's Wassem 5 and 6 were only 400 and 100 barrel producers, respectively, they represent a better initial than was thought they were capable of showing, due to structural location of the wells. Wassem 5, a 4758-foot completion, has its 8¼ cemented eight feet above bottom and is producing 26.5 gravity oil. Wassem 6 was brought in from 4783 feet with the 6¼-inch landed at 4776 feet.

George F. Getty maintained a daily average production of 4630 barrels by completion of his Alamitos 7 for 1800 barrels of 26.8 gravity oil at 4735 feet.

Marland Oil Company, discoverer of the field and its greatest producer of oil, brought in three wells and one work-over job during the week for a total initial of 4925 barrels, giving the company a daily average of more than 14,800 for the week ending May 14. Marland's Bixby 8, a work-over, made 1400 barrels from 4502 feet with the 8¼-inch cemented at 4338 feet. Its Selover-McGrath 10 was brought in for 1190 barrels from 4776 feet after cementing 8⅝-inch casing at 4716 feet. No. 10 is producing 26.9 gravity oil; it shows a tubing pressure of 310 pounds against a casing pressure of 770 pounds. Marland's Selover-McGrath 13 was a 1135 barrel well at 4696 feet. Gravity of its oil, however, is nearly a degree higher than that of No. 10. The fourth well put on production by the Marland this week was No. 14, on the same property. It produced 1200 barrels of 27.3 gravity oil from 4775 feet.

Petroleum Securities Company established a daily average production at Seal Beach of 6975 barrels with completion of its Bryant 1 and Bryant 2 for initials of 1500 and 2710 barrels, respectively. Bryant 1 was brought in from about 4700 feet, while the latter was completed at about 4717 feet.

The Superior Oil Company, which is drilling four other wells in the field, brought in its Kenkel 1 for an initial of 2100 barrels. Kenkel 1, a 4700 (plus or minus) completion, landed the 8¼-inch casing at 4662 feet and is producing 26.7 oil.

As seen from the relatively small calibre of this week's completions, the wells are going to have to hold up above the average for Los Angeles Basin producers if the small independents are to break even. This is due to the fact that, notwithstanding the present low price posted for Seal Beach oil those who are able to dispose of their oil at all must dispose of it at prices far below the market. In other words, Seal Beach oil is being bought at prices in the neighborhood of 50 cents. After royalty has been deducted, this does not leave the producer much of a profit.

Texas Panhandle Storage Makes Large Gain During April; Shipments Less

By H. H. KING
Staff Representative

AMARILLO, Texas.—Crude stocks accumulated in the Texas Panhandle district during the month of April at an average rate of 74,061 barrels daily, owing to retarded tank car movement of oil to interior refineries and to the Gulf Coast export terminals, while relief through direct pipe line outlet was negligible. Crude stocks rose to a new high mark at the close of April for a total of 16,896,220 barrels, or a gain of 2,221,820 barrels. The empty storage in the district was reduced to approximately 5,585,000 barrels, with six new 55,000 barrel steel tanks being erected by Prairie Oil and Gas Company on the Kings Mill tank farm.

Decreased demand for Panhandle crude at interior refineries and for coastwise movement via the Gulf Coast caused tank car shipments to drop to a low level of about 4,400 cars for the month of April. Sweet crude from the Seminole district, Oklahoma, has dealt the Panhandle spot crude market a hard blow, even though three independently owned gathering systems in Carson and Hutchinson Counties are offering to gather and load crude on board tank cars for five cents per barrel, with one per cent deduction for evaporation and other losses.

Crude stocks will not continue to soar to higher levels in the Panhandle district, as the Humble Pipe Line Company's 10-inch carrier started operations April 29, while the Gulf-Magnolia ten-inch line began running regularly on May 7. Both of these lines are averaging between 25,000 and 30,000 barrels daily, and will be running at maximum capacity as soon as the pumping equipment is limbered up. The third and last of the direct pipe lines for the district will be placed in operation shortly by Prairie Pipe Line Company, which will move the crude via an eight-inch line to Ringling, Oklahoma, thence to storage in the Mexia and Ranger districts. Prairie does not have line capacity to ship this crude north from Ringling station, while at present Prairie does not have a market for any that could be delivered to the Gulf Coast via the Pure Oil Pipe Line Company's Mexia-Smiths Bluff line. Prairie has delivered 565,175 barrels of Panhandle crude to Mexia via tank cars, and has approximately 880,000 barrels of idle storage room at the latter point that can be pressed into service.

Big Storage Owners

Six major companies, including Marland and Phillips Petroleum Company, increased their Panhandle stocks 1,817,650 barrels during April. Marland Pipe Line Company filled storage at a faster rate than any other concern, and finished April with 1,727,500 barrels on hand, or an increase of 651,470 barrels. Marland has contract to deliver Humble Pipe Line Company 15,000 barrels Panhandle crude daily beginning May 1, but Humble held off on starting on this contract until its line is put on capacity load. Prairie increased its stocks by 357,310 barrels during April, while Phillips Petroleum Company added 316,175 barrels over the month. Gulf and Magnolia each piled up about 310,000 barrels. Magnolia held slightly above four million barrels of crude when pipe line relief was obtained.

The Plains Pipe Line Company, Wichita Falls, and the Bell Oil & Gas Company, Tulsa, have been the most active purchasers of crude in Carson and Hutchinson Counties, and are stocking up on cheap priced oil to store same for better prices. The former company has accumulated 596,625 barrels of storage oil, while the Bell Oil & Gas Company is reported to have arranged for a loan of $500,000 to be spent on buying low priced crude in the Panhandle and storage for same, and held 250,975 barrels of storage oil at the close of April. Bell is reported to have taken a six months lease at $400 per month on two 55's from J. R. Phillips et al; one tank from the Lucky Ten Oil Company; and to have purchased several large tanks in the field. Phillips Petroleum Company has also been active in taking leases on field storage, having leased a 55,000 barrel container from the Cockrell-McIlroy Oil Company and an 80,000 barrel tank from the Dixon Creek Oil Company, while two 55's were purchased from W. H. Holmes, Henry Riley and H. Hill for $32,000.

Crude stocks in the Texas Panhandle district at the close of April, 1927, is listed below by companies:

Magnolia Pipe Line Company ..	3,931,375
Gulf Pipe Line Company.....	3,025,640
Phillips Petroleum Company ...	2,912,900
Prairie Pipe Line Co.	1,786,150
Marland Pipe Line Company...	1,727,500
Humble Pipe Line Company...	953,025
Skelly Oil Company	918,050
Plains Pipe Line Company.....	596,625
Bell Oil & Gas Company.....	250,975
Empire Gas & Fuel Company..	198,025
Dixon Creek Oil Company.....	170,350
Mid-West Exploration Co.	80,060
Japhet Production Company....	68,825
Atlantic Oil Producing Co.....	60,250
Devonian Oil Company	55,975
Coble-Whittenburg Oil Co.....	49,975
Roxana Petroleum Corp.	30,720
Derby Oil Company	22,540
McIlroy-Herring Oil Co.	22,350
Champlin Refining Company....	17,860
The Texas Company	16,200
Toronto Pipe Line Co.	850
Totals	16,896,220
Totals close March	14,674,400

Frozen Oil Handled in Special Tank

Walden, Colo.—A unique experiment of the Black, Sivalls & Bryson, Inc., tank manufacturing concern has proven a success in the Walden field in Colorado where the Continental Oil Company has its freak "ice cream" well from which the oil comes out resembling that frozen dainty. 1 1000-barrel tank has been erected and the oil is flowing into this out of a flow line of 60 barrels pressure. Expansion of the gas causes the oil to freeze, temperature of the oil as it leaves the pipe being some 170 degrees below zero. This is melted by means of four steam lines placed at regular intervals around the bottom of the tank, steam from which is diverted by an "L," causing it to circulate. The result is that the lower part of the tank is entirely free from ice, but the upper half is still thickly coated. It is planned to build the tank eight feet higher, place coils in the bottom and thus avoid the use of steam. This will prevent there being any water in the oil whatever.

New "Kink Finder"

Denver, Colo.—Paul B. Whitney, geologist for the Repollo Oil Company with headquarters at present in Boulder, is having marked success with his new "kink finder," an instrument which he designed and invented for the purpose of exploring the inside of damaged strings of casing. The result of a test given recently is a paper roll with a graph of every foot of casing through which the instrument passed, down to 4075 feet, where it disclosed a pinch in the pipe, less than three inches, through which it could not pass. The record showed each joint and dent, correctly located one joint which was shorter than the others by two feet and marked on the graph the point where it passed a steel nipple.

Extend Unit Operation in Montana

Casper, Wyo.—It is probable that the unit plan of operation which has recently been inaugurated by the Midwest Refining Company, the Ohio Oil Company and the Continental Oil Company in the Elk Basin field in Northern Wyoming, will be employed similarly by these companies in the Grass Creek, Lance Creek and Osage fields in this State. The plan has been followed for years in the Salt Creek field and has proved itself efficient and entirely satisfactory. At Elk Basin the Midwest, being the largest owner, will be in charge of the operations, with an advisory committee from the three companies assisting on consultations. Midwest will stand half of the expense, and the others will share one-quarter each.

Damon Mound Production Held Up By Nursing Old Wells

Sinclair's lease holds daily average for two years without single new completion

By WALLACE DAVIS
Staff Representative

TWO years ago Damon Mound field, northwestern Brazoria County, Texas, was making 950 barrels daily. Today it is running the same average without a single completion during the two years. This remarkable maintenance of production has been made possible through proper lease care, the nursing of old wells along, and continued efforts toward the elimination of waste.

Sinclair Oil & Gas Company has control of Damon Mound production with the exception of one pumping well of the Humble Oil & Refining Company. Forty of the 41 wells of Sinclair in the field are pumpers while the other is being flowed by air lift due to its greater volume of water. Shallow wells, 1400 to below 2000 feet, are being pumped from central power, and deeper ones, ranging as deep as 3200 feet, are pumped by oil engines.

Absence of gas pressure is a characteristic of Damon Mound. Even in the early days gas pressure was weak generally, running strong only in wells of freakish nature, lying usually along a prominent fault cutting the field on the western side. As the dome is of the one sand field type, the varied depths having apparently resulted from the fault, what gas pressure the sand originally held has been exhausted.

J. E. Hooper, production superintendent for Sinclair in the Gulf Coast division, set out several years ago to handle the Damon Mound lease from a strict economical standpoint. Now he has the waste problem eliminated. All production on the lease gravitates to the stock tanks, all pumps for moving oil having been done away with. Production is pumped directly into an elevated gun-barrel from the wells. From there it bleeds into a treating tank set at a lower level, while salt water bleeds off into a flume leading to a salt water reservoir. After passing through the hay tank the oil continues on its gravity course to stock tanks, pipe line fluid.

Gravity System

Salt water, which averages about four per cent at Damon Mound, is gravitated from the treaters through a flume to a central pit. From the pit it is disposed of through a cavity well, which, due to its tendencies to flow from being flooded, makes it necessary to pump the water in, using a 10x6 steam pump running as high as 14 pounds pressure.

Production from 37 of Sinclair's wells is treated through the hay tank while that of the four remaining wells is put through a dehydrator because of the large volume of water carried. The well flowed by air is the Bryan 16, now producing 70 barrels of oil and between 4000 and 5000 barrels of water.

As production of each well shows a tendency toward decreasing the well is watched as experimental work, such as lengthening or shortening of the stroke or increasing or decreasing of stroke, is carried on. As a well shows sand trouble it is cleaned immediately. As an example of Sinclair's success in working over old Damon Mound wells the Masterson 20, which completed July 20, 1924, for 20 barrels from near 1500 feet, made 60 barrels when deepened approximately 15 feet recently. This case was unusual in method, as the wells are more frequently plugged back rather than deepened due to encroachment of water. As the salt water rises in the hole to gain in its recovery percentage the wells are plugged back, thereby cutting down this percentage.

Engine Records

Accurate records are kept by Sinclair on the performance of its engines on the Damon Mound lease. Such records as the exact amount of fuel burned by each engine, the amount of repairs, with costs, for each engine, the revolutions, changes in stroke on pumpers, etc., are available at any time at the field office.

And thus, by handling an old lease with "gloves," the company has kept it on the basis of a good asset rather than letting it dwindle, as is the case with many old leases in largely depleted fields, to a losing proposition.

Damon Mound had produced 6,610,000 barrels of oil up to January 1, 1927, since its discovery late in 1916. From a total of 292 holes drilled around the dome 86 have produced oil, 155 were dry and the remainder were sulphur tests. The Texas Exploration Company did most of the early exploration work and opened the first production, drilling from surface indications—gas seeps, sulphur water and sour dirt. While wildcatting on the dome began as early as 1901, little drilling was done at this early period, and in 1905 work was abandoned there because of rush work in other sections of the Coast, and was not resumed until 1916. Sinclair bought the holdings of the Texas Exploration Company in 1919, and since that time has had charge of practically all of the development of any great significance there.

While several wells at Damon Mound were considered in the "gusher" class during the early development of the field, including Sinclair's Bryan 3, 15 and 16 and Masterson 10, all of which are on record as making around 5000 barrels initial, there was never the boom spirit present as at most of the Coastal pools. Bryan 3 was completed by the Texas Exploration Company for more than 5000 barrels from 1449 feet in 1917. Bryan 15 and 16 were both completed by Sinclair in 1920, making roughly 5000 barrels each from 3474 and 3193 feet respectively. Number 16 has produced more than 800,000 barrels and No. 15 more than 600,000 barrels to the present time. Masterson 10 made 5000 barrels from 3256 feet in 1920.

Humble's Gallagher 2, now producing between 30 and 40 barrels, was brought in for 1000 barrels from 3212 feet in 1920.

While in some rare cases the oil has tested as high as 35 gravity, the bulk of production there averages around 21.5 Baume.

Damon Mound is located nine miles south of Big Creek field and 10 miles northwest of West Columbia. The surface rise at the peak of the dome is more prominent than that of any other dome in the Gulf Coast, standing 83 feet above the surrounding elevation. The salt plug has been encountered in wells as shallow as 300 feet. All of the worthwhile production in the field is located on the west side of the dome, while the only shows found at any other point were on the northeastern side.

Colorado Law Regulates Production of Oil and Gas; Provides Penalties

IN line with the present trend toward conservation a law has recently been passed in the Colorado legislature which offers to this State its first law governing the conservation of natural gas produced in Colorado fields. Growing out of the necessity of a law on conservation of gas in Colorado the bill proposing such a law was introduced in the State legislature by Representatives Hill and Flebbe and Senators Wheeler, Warren, Norvell and Bannister.

The act, which was passed and consequently put into immediate effect, is known as House Bill No. 354, and is as follows:

"To promote the conservation of gas, creating a gas conservation commission with authority to adopt and enforce rules and regulations to prevent the waste of gas and imposing penalties for such waste.

Be it enacted by the General Assembly of the State of Colorado:

Section 1. The avoidable waste or wasteful use of any gas hereafter produced in the State of Colorado, whether the same be natural gas from gas wells or casinghead gas from oil wells, is hereby prohibited and declared to be unlawful.

Section 2. The Governor of the State of Colorado is hereby authorized and directed, within 30 days after this act becomes effective, to appoint a Gas Conservation Commission, consisting of three men, each of whom shall be over 30 years of age, and shall have had at least five years experience in the business of producing oil or gas. The State Oil Inspector shall be an ex-officio member of such commission and shall, through himself and his deputies, comply with and enforce such rules and regulations to prevent the waste of gas as said commission may from time to time adopt and promulgate. One of the members originally appointed to said commission shall serve for a term of two years from and after his appointment; one of the members for a term of four years, and one of the members for a term of six years. All members of said commission, after those first appointed, except said State Oil Inspector and such as may be appointed to serve for unexpired terms, shall serve for six years. The Governor shall by appointment fill any vacancies in said commission caused by death, resignation, removal for cause or otherwise, but any such interim appointee shall serve for the unexpired term only of his predecessor. The members of the commission, other than said State Oil Inspector, shall serve without compensation and said State Oil Inspector shall receive no additional compensation for the performance of any duties imposed upon him by this act.

Section 3. Such Gas Conservation Commission is hereby authorized and empowered to adopt such reasonable rules and regulations as may be proper for the conservation of the gas resources of the State and the prevention of gas waste, and the findings of such commission, after an investigation and hearing, that any corporation, association, partnership or individual has violated any such rule or regulation, shall be prima facie evidence of the violation of this act in any civil or criminal proceeding arising hereunder.

Section 4. Any violation of this act is hereby declared to be a misdemeanor, punishable by fine of not less than Five Dollars and not more than One Hundred Dollars, and each day's violation hereof shall constitute a separate offense. It shall be the duty of said State Oil Inspector, under the direction and control of said Gas Conservation Commission, as well as of the attorney general or the district attorney of any county, to initiate proceedings for the punishment of any violation of this act. Said Conservation Commission, on behalf of and in the name of the State or any private party claiming to be injured by any violation of this act or any rules or regulations promulgated hereunder, may sue in any court of competent jurisdiction for an injunction and pursue such other civil remedies as are available for any violation of this act. Provided, however, that since the control of all lands heretofore or which may hereafter be granted to the State by the Federal Government is by the State constitution expressly vested in the State board of Land Commissioners, no provision of this act shall apply to any such lands so long as the title thereto or to the minerals therein contained shall remain in this State.

Section 5. All acts or parts of acts inconsistent or in conflict herewith are hereby repealed.

Section 6. In the opinion of the General Assembly an emergency exists, and this act shall take effect and be in force upon and after its passage.

Rocky Mountain Notes

An oil pipe line is to be laid from the LaBarge field to railhead by the California Petroleum Company this year, the work to be started by August 1, 1927, according to the requirements of the certificate of convenience and necessity granted the company by the state utilities commission. Line will be 38 miles in length, of 6-inch pipe. Terminus is to be near the town of Kemmerer.

This company has some 12 producing oil wells and leases of 2500 acres in the field. It has one 55,000-barrel steel storage tank in the field.

Report on the operations of the Shidler Syndicate in the LaBarge field is to the effect that rig has been skidded, hole having been lost at the location on section 33-27-113. This location was considered a very good one, being but a short distance from the California Petroleum Corporation's producing wells. Total depth was 830 feet and there had been several encouraging showings of oil and gas.

Midwest Refining Company will resume operations at its DeCamp 1, southeast section 21-27-113, in the LaBarge field. This well is being drilled on a joint account with the Utah Oil Refining Company and has been shut down during the winter at 1034 feet.

One and one-half miles east of the California Petroleum Corporation's wells in the LaBarge field the Rainbow Oil Company is rigging up on its baker permit of 2540 acres, northwest section 25-27-113. This hole is intended as a deep test and will be drilled to 4000 feet or more, if necessary.

W. D. Newlon interests have started their test on southwest section 12-26-113, two miles southeast of the company's first well in the LaBarge field.

Two contracts have been given for the drilling of tests on the Guthrie permits. Locations are south half section 1-26-113, and north half section 24-26-113. John Young of Los Angeles is the operator.

Camp is organizing and rig up on test of the Seabeck Oil Company's northeast section 35-27-112. Joseph A. Minton and associates have material on location and Star rig hauled for test on section 9-27-113.

Reduce Natural Gasoline Valuation at Salt Creek

Casper, Wyo.—Mule Creek oil field in vey has approved the recommendations of the leasing division of the survey for the extension of the relief basis for the valuation of natural gasoline at one-fifth instead of one-third of the market value in the Salt Creek field. This was petitioned by the Midwest Refining Company, the Carter Oil Company and the Ohio Oil Company on the ground that operation of natural gas gasoline plants in the fields in the Rocky Mountain district cost much more than in any other section of the United States. Supervisor J. W. Steele of the leasing division approved the petition, as did also Dr. George Otis Smith, director of the survey.

R. S. Ellison of Casper, vice president and general manager of the Midwest Refining Company, has been elected president of the new state historical commission. Election took place at the first meeting of the new commission, held in Cheyenne, May 6.

CULLED FROM THE NEWS

By Kent Ridley

While the painful details are lacking, the papers are authority that our home town has been saved from a tax rate increase by a general upward revision of valuations. Which ever way it happens is no concern to us, as we have to pay it anyway. Which reminds us that Texas and Oklahoma maybe are not such big losers on their production tax. What they want is more barrels at higher prices.

* * *

And some of these Texas operators ought to be reminded while they are playing around with Judge Bell and the legislature, that the Judge is a fine gentleman who was selected for his job, while the legislature is made up of a bunch who were elected. And there is a vast difference between the two synonymous terms.

* * *

That story from California about the gasoline wells at Goleta could be used as a basis of wondering if some of those subterreanean disturbances have not ruptured a pipe line and some of that California oil the statisticians have been known to lose, is not coming to light in an unexpected manner.

* * *

Speaking of market situations, a newspaper headline says "onions lose strength," Oil is slipping.

* * *

If Mr. Hoover could have made good on stopping the Mississippi flood he would probably have been invited to go to Tulsa to give out another interview. His "glass pockets" talk has been quoted a number of times without anybody pointing out that since adopting that glass pocket idea the Industry is broke where the glass is.

* * *

While Mr. Teagle was down at Washington appealing to the government for some means of help in controlling the production of oil, his company's official mouthpiece, The Lamp, was asking "is it not time to stop looking at fuel oil as an unwelcome by-product?" And it was not many months since the oracles inspired from that source were looking upon it as a crime to burn fuel oil, on the assumption that every atom that could be so converted should be made into gasoline. The same people who a few months ago were wondering if there was enough oil to last, are now saying that the period of "overproduction" will last for several years.

* * *

"The eyes and ears of the oil industry" are getting ready for their annual gathering at Dallas on May 23 and 24, and geophysical methods being the principal subject on the program means probably that the "ears" will be to the ground. Any one who thinks the scouts do not have anything to convene over ought to attend one of their sessions. And, if you must have it that way, a bunch that has spent a whole year loafing around country hotels is at least entitled to two days where they have hot and cold running water.

Frank A. Howard, head of the research department of the Standard Oil Company of New Jersey told a group of oil burner manufacturers in an address, that the gamble of producing oil would not permit the producers to further gamble on the price. In other words, the major units are prepared to spend millions on wildcat efforts in remote places, which efforts, if successful would break the market for the oil which might be found, and yet those same concerns could not guarantee a feul oil price over a period of three or five years. To paraphrase a historical quotation, "Millions for production, but not one cent for sales."

* * *

The Natural Gas Association has a research department which looks out for more and better uses for natural gas as fuel. Wonder what the development of that natural resource would have been if in its early stages a federal commission had been gathered to exercise itself about conservation of the supply and restriction of its use to such higher uses as lights and fuel for domestic cooking? If the gas men can outsell the oil industry even in its own plants, there are certainly possibilities for oil to make progress as a fuel where gas is not available. But any progress along that line would be continually embarrassed by the cry that the oil supply is limited—with no proof for the cry.

* * *

That there should be an "overproduction" of a commodity of as varied, valuable and economic use as is petroleum should exist is a reflection upon the selling ability of the industry producing it. Salesmanship so far with the oil business has been confined to getting the other fellow's business without any effort to create new outlets. In fact the extension of use has been discouraged through solemn warnings that continued supply was questionable, and refusal to make contracts over long periods.

DO YOU REMEMBER?

Or Did You Ever Know?

1. What year saw the record number of wells drilled in the United States?
2. Who is given credit for having drilled the most oil wells?
3. What was the average tax on gasoline in 1926?
4. What and when was the highest daily production in the United States?
5. How much have the companies composing the Standard group paid in dividends since the dissolution decree in 1911?

(Answers to these questions will be found on "Squeaks" page in this issue.)

Winkler County Show Believed to Mark New Pool Of Texas-New Mexico Line

San Angelo, Texas.—Roxana Petroleum Corporation has contracted to purchase a half interest and the operating control of the Llano Oil Company's partially completed wildcat oil producer on the Scarborough Ranch in Winkler County, near the south line of New Mexico. This wildcat test is generally conceded to be a new pool opener for West Texas, as it has about 600 feet of 35.2 degree gravity oil in the hole from pay at 2992-3065 feet, and is 13 miles due north of the Hendricks field, the nearest production. Even though deeper drilling on this wildcat does not afford an increase in oil production the showing has satisfied oil company officials that a field exists nearby, and trading has been brisk on both sides of the Texas-New Mexico line during the past week, with very little close-in acreage to be had.

Roxana purchased a $6000 spread of acreage around the Llano test when the location was made, and made a second purchase several weeks ago when oil and gas was encountered, involving a cash payment of $25,000. These two purchases gave Roxana about 1400 acres of checkerboard protection. Llano retained about 3600 acres, including the 160-acre lease bearing the test, and this will be thrown together with Roxana's holdings, making a total of 500 acres. Roxana is reported to be paying a cash bonus of $55,000 to Llano Oil Company for a half interest in the pooled holdings and the well, with Roxana taking charge of development. The consummation of this deal will leave Roxana with a total investment of $86,000 for a half interest in 5000 acres of choice leases, or on a basis of $34.40 per acre and a free well.

The Scarborough wildcat is located at the center of section 1, block C-22, Public School Lands survey, and two miles south of the New Mexico line. The test is being drilled on contract by the Eastland Oil Company to 4000 feet, with Oscar Yates, who was the driller on the Hendricks field discovery well, in charge of the drilling. A successful completion will afford Oscar Yates a second wildcat strike in the county within a year. The Scarborough test logged the top of the salt at 1115 feet, with salt formation continuing to 2640 feet. The elevation is 2943 feet. Some question exists as to the top of the big lime horizon, as it was placed at 2655 feet, and later changed to 2953 feet. A string of 8¼-inch casing was landed at 2675 feet, and the balance of the hole is opened.

The Yates Field

The Yates shallow field in eastern Pecos County continues to make new records on well production, and late last week the Mid-Kansas & Transcontinental Oil Company's I. G. Yates 1-B, section 61, gauged 500 barrels on a single hour test after taking 62 feet of additional pay to a total depth of 1285 feet. This well was brought in May 5 making 2110 barrels daily at 1185-1223 feet. It gauged 300 barrels hourly through two-inch choke on Monday of this week. Mid-Kansas & Transcontinental's Yates 1-C, section 60, extended the field about one-half mile east early this week making 50 barrels hourly at 1014-93 feet, with drilling still underway. The same interests' Smith-Taylor 1, located on the east line of section 33 and nearly a mile northwest of production, was logging the formations higher than any test in the field late last week having encountered the "McCamey" lime at 710 feet, with a surface elevation of 2645 feet, and at last reports was drilling at 950 feet. The six shallow wells in the Yates field are now rated good for between 15,000 and 20,000 barrels daily, or almost double the pipe line capacity of the Illinois Pipe Line Company.

Gas Men Would Co-operate With Oil Producers

(*Continued from page 29*)

a better medium for propelling oil than either one used separately. The gas dissolved in the oil, he feels, would reduce its viscosity, offset the oxodizing effect of the air and make the oil easier to move while the air would remain in a gaseous state and propel the oil to the hole.

Other mixtures of natural gas and other gas that might be used might eliminate explosions and reduce the viscosity of the oil. These other gases are flue gases, coal gas, etc. The flue gases consist mostly of carbon dioxide and nitrogen, and make a good combination for the purpose, since the carbon dioxide would dissolve in the oil very readily, reducing its viscosity and making the oil easier to move by the nitrogen which has very little if any effect on the oil except as a propulsive agent.

In spite of these virtues, Mr. Brewster has found two serious objections to the use of flue gases. First, acid is found in flue gas and must be removed by proper scrubbing to prevent the rapid corrosion of transmission lines. Second, the return gas from the producing wells may soon become so diluted with non-combustible gases that it cannot be used for fuel.

The coal gas would probably be as satisfactory as natural gas as a propulsive agent and would not be as objectionable as a non-combustible gas. However, it would require scrubbing to remove all tars and gummy substances that might plug the pores of the sand.

Mr. Leonard, in a later comment during the discussion that followed Mr. Brewster's paper, suggested that the combination of gas and air recommended by Mr. Brewster could be used only where the return gas was not used for fuel or in gasoline plants, as air in fuel gas or gasoline plants is a serious condition and must be held to a minimum.

He further insisted that the cost of producing and treating coal gas would offset the cost of pumping additional natural gas where the natural gas was available.

The uncertainty of keeping the air-gas mixture correctly proportioned is the chief hazard mentioned by Mr. Brewster. Mr. Leonard says, however:

"The uncertainty of keeping the air-gas mixture correctly proportioned is not the only hazard as the mixtures will not remain the same in pipe line travel due to the separation of one from the other.

"The explosive mixture is from 85 to 95 percent air. Low pressure is not dangerous at 300 pounds. Mixture pressure explosion may reach pressure of 2500 pounds."

Other interesting divisions of Brewster's paper included methods for preventing explosion, air-gas slugging, the effect of structure on recovery, the selection of intake pressure wells, the preparation of intakes, cleaning out to keep wells producing, and the actual problems of producing.

In the final discussion of Mr. Brewster's talk, Mr. Leonard, who was leading the discussion made several interesting comments in conclusion:

"I believe that small wells could be jetted the same as water wells. If necessary a very small syphon line would be used inside of small tubing in proportion to each other, and jet or flow a well with a small quantity of air or gas."

"We believe that tubular sucker rods will eventually play a larger part in the production of oil from small wells. In this manner, air or gas can be inserted in the well through the sucker rod, and act as the gas lift and still leave the well on the pump; pumping and flowing the well both through the 2-inch tubing."

The round table discussions, led by J. D. Creveling, were among the most valuable sessions of the meeting. Mutual answering of the many questions that came up gave an opportunity for a multitude of experiences to be exchanged.

New officers of the association, elected Thursday, at the closing session included N. C. McGowen, Shreveport, Louisiana, president; S. W. Meals, Pittsburgh, Pennsylvania, vice-president.

Directors were reelected and included L. K. Langdon, Cincinatti, Ohio; H. L. Montgomery, Bartlesville, Oklahoma; H. C. Morris, Dallas, Texas; A. W. Robertson, Pittsburgh, Pennsylvania. T. R. Weymouth, Buffalo, New York, was also elected a director to take Mr. Meals' place.

Production Advanced at Wilcox-Pampa

Amarillo, Texas. — Gulf Production Company's wildcat test on the J. M. Saunders Ranch, Gray County, advanced production two miles to the northeast of the Wilcox-Pampa field Sunday with an initial flow of 3000 barrels of 42 degree gravity oil after heavy shot in broken lime and arkose formation at 2969-3080 feet. Four other wildcat oil strikes have been made within the past six weeks to the south and east of the Wilcox-Pampa field, thereby proving a large amount of virgin acreage for development when the crude market justifies.

The performance of the Gulf wildcat furnished a surprise, and a scramble for leases and royalty followed. Gulf's Saunders 1 is located in the southeast corner of the southwest quarter of section 40, block 3, I. & G. N. survey, on a 130 acre lease, and cures lease on 960 acres. The well logged the top of the lime at 2250 feet, with a surface elevation of 3085 feet. First oil was encountered at 2955 feet, and the top of the granite wash was logged at 3098 feet. The hole was drilled to 3193 feet, or 108 feet below sea level, with a slight spray of oil, and plugged back to 3080 feet when shot Sunday with 140 quarts of nitro at 2969-3089 feet. During the first 13 hours the well gauged 2010 barrels, or 155 barrels per hour, and during the 24 hour period ending Tuesday morning was holding at 125 barrels per hour. Humble Pipe Line Company connected to the well with a six-inch line prior to the shot, and is taking all the oil, which brings a price of $1.08 per barrel. Roxana and Magnolia have made direct offset locations to be drilled immediately.

South of the Wilcox-Pampa field, Gray County, Henry Riley-Heck et al's wildcat test on the Mrs. J. A. Hopkins land is showing for a commercial oil producer in granite wash pay at 3010-20 feet, with possibilities of being the first well to make oil production south of the granite ridge. This wildcat is located in the northwest corner of section 66, block B-2, and is lowering 6⅝-inch casing to set at 3000 feet with a light spray of oil. The elevation of this test is 3113 feet. Between this wildcat and the field proper, the Majestic Oil Company's (was Blackwell & McGee) J. B. Bowers 1 swabbed and flowed 590 barrels in 15 hours of 42 gravity oil May 12 from granite wash pay at 2965-3030 feet, with a surface elevation of 3086 feet. This wildcat is located in the southeast corner of section 92, block B-2, and was financed by selling acreage and units in the enterprise. Gulf is starting an east offset, while other nearby locations are assured. Sinclair Pipe Line Company built a line to purchase the oil. The well is swabbing 19 hours daily, as the steam is needed to run the line pumps the balance of the time. M. Travis et al's wildcat producer on the J. D. Back land in Eastern Gray County, and The Texas Company's G. H. Saunders 3, located in the north centeral part of the county, are the other wildcat strikes made recently.

About 10,000 barrels of daily production was still being held back in the Cockrell Ranch section of Hutchinson County early this week owing to Humble and Marland's lines not having ample capacity to run the oil as produced. Several new completions in this pool are due this week. McMan Oil & Gas Company's Cockrell 2 an east offset to big production, swabbed and flowed 600 barrels initial after plugging back from water at 3061-64 feet and shot 360 quarts at 2938-3032 feet.

Dallas All Set for Two-Day Meeting of Scouts

Dallas, Texas—Prominent figures in the oil indutry have been obtained to address the members of the National Oil Scouts Association of America, when the fourth annual convention is held at the Jefferson Hotel May 23 and 24. Program and entertainment committeemen had all arrangements completed early this week for putting over the most successful meeting held to date, and early hotel reservations point to a large attendance of scouts from Oklahoma, Arkansas, Louisiana and Texas.

J. Edgar Pew, vice-president of the Sun Oil Company and former president of the American Petroleum Institute, will address the scouts at the opening business session Monday morning, while other speakers include Carl Young, manager of the Bureau of Standardization for the A. P. I.; R. B. Whitehead, chief geologist for the Atlantic Oil Producing Company; R. E. Burt, mayor of Dallas, and likewise an oil operator, and others.

The business sessions will be held on the roof garden of the Jefferson Hotel, and a number of papers dealing with various producing areas in the Mid-Continent district have been prepared by scouts to read, while printed copies are being made up for distribution to all intereseted. This is somewhat of a new feature of the scout convention, although a few papers have been read at past meetings, but not made available in printed form.

The visiting scouts will be the guests of the various oil companies in Dallas Monday evening at a banquet to be held at the Jefferson, while a special entertainment program will follow. The election of officers will take place at the business session Tuesday morning. A luncheon and golf tournament will follow Tuesday afternoon, and those not interested in golf will be entertained with a barbecue, which has won a permanent place on the scouts' convention program. Mr. Pew has offered a silver cup for the winner of the golf tournament, while other prizes have been posted.

The wives of the scouts will be entertained with theater and bridge parties, and will also be invited to attend the banquet. A dinner dance at the Baker Hotel roof garden will be the final event on the scouts' program Tuesday evening.

Roxana Gets 700 Barrel Well at Allen Dome

Houston—Roxana Petroleum Corporation opened a new coastal producing area May 17, when the Allen Bernard River 1 wildcat at Allen dome, Brazoria County, came in without bailing from eight feet of sand topped at 5131 feet, flowing 700 barrels pipe line oil, 31 degrees Baume, through a quarter-inch choker.

This porduction is the first success of Roxana at Allen dome after 20 months of development, which began immediately after the salt was outlined in the early fall of 1925 by use of the torsion balance. Allen Bernard River 1, located 485 feet south, 79 degrees and 58 minutes east of the north corner of the Charles G. Alsbury League and 20 feet west of the east bank of the San Bernard River, is the seventh test drilled at the dome.

Production is temporarily being run into three 500-barrel steel tanks, and more storage was being moved to the location Wednesday.

No other deveolpment work is now under way at Allen dome, the Poole 1 having been abandoned May 1 at 836 feet as a shallow formation test. Allen 3 was abandoned April 25, at 5837 feet in heaving shale, one of the deepest wildct tests drilled in the Texas Gulf Coast.

Roxana's discovery will mean no menace to the production situation, since the company has approximately 8000 acres blocked practically solid on and around the dome.

Eastland County Wildcat Flows 400 Barrels

Ranger, Texas — Moody Corporation's wildcat test on the J. C. Dyer farm in northwestern Eastland County was flowing 400 barrels high gravity oil daily early this week after being drilled 11 feet in the Ranger sand to a total depth of 3860 feet, with a good flow of gas in evidence. This well is a west offset to a 10,000,000 cubic-foot wet gasser completed May, 1925, in lime at 3646-74 feet by H. H. Adams and associates. The latter test is in the northwest quarter of section 466, and will be deepened to the oil pay. The Moody well is flowing steadily, and logged the formations about 65 feet higher than the offset gasser. Transcontinental Oil Company's R. F. Weddington 1, located in the northeast corner of section 2054, is drilling below 2780 feet, and is the next completion due.

Belva Oil Company's F. Good 1, located in the Ramsower pool, near Leeray and in Eastland County, was completed last week, flowing 1000 barrels and 3,000,000 cubic feet of wet gas daily at 3690-92 feet.

Use of Air and Gas in Oil Recovery

(*Continued from page 32*)

desired back pressure can be held on the sand while cleaning out.

The use of compressed air or gas to clean out is much cheaper and quicker than any method so far introduced. Especially if high pressure air or gas lines are readily available on the property and if there is sufficient compressor capacity to supply the demand. The equipment for an air cleaning outfit, consisting of a pulling machine, tubing tools and a few high pressure connections are easily moved by a team or a tractor at one load and it only takes a few hours to tear down, move and erect.

If high pressure lines are not laid at strategic points on the lease or if it is not deemed advisable to use the compressed air system of field lines for cleaning out a small portable compressor unit and complement of air receiving tanks are necessary equipment with the pulling machine. In most cases a well can be cleaned out with air in a week or less.

Producing

One of the most serious problems in pressure recovery is the producing of the oil. During the early stages the pressure and increased movement of fluid brings in paraffin, sand and muck and frequently causes the wells to cave. Cups are quickly cut out, plungers and barrels wear rapidly and sand up.

Where air is used in the balls and seats or similar equipment, working barrels, plungers and tubing commonly corrode very rapidly especially if corrosive waters are present. The alternating action of wetting by water and drying by air may promote rapid oxidation and pitting even if the water is not corrosive.

This cutting or corrosive action cannot always be eliminated by the use of non-corrosive material as minute flaws in the structure and composition of the metal are quickly eroded.

High differential pressures between intake and outlet wells have a tendency to by-pass and quickly establish channels that are hard to control. If it is necessary to go to high pressures due to tight fine grained sands a back pressure should be held on the producing well, as a small differential in pressure between the hole and a few feet back into the sand is all that is necessary to cause movement of the oil into the hole. Any higher differential in pressures is a waste of energy at a point where it cannot do any useful work. It has been demonstrated in laboratory experiments that the drop in pressure due to resistance of gas and liquids passing through a sand is not directly proportional to the distance traveled. The greatest drop in pressure occurs a short distance back from the face of the sand near point of discharge, which shows that a very high back pressure can be held without affecting production.

Bennett[5] and Sclater demonstrated in the Panhandle field that the rate of fluid entering a hole is not affected by pressure until about 85 per cent of the rock pressure is attained, after that pressure is reached the rate of flow is materially decreased.

The quickest way to find the desired differential pressure is by trial and error with back pressure. The highest back pressure which produces the same amount or slightly less oil than was produced at atmospheric pressure gives the desired differential.

Holding back pressure either by gas pressure on the casinghead or by high fluid head, retards the influx of sand, muck, etc., to a considerable extent without materially decreasing the oil production. However, in extreme cases it is necessary to flow the wells by the gas or air lift method as pumping troubles cannot be eliminated.

The gas or air life method is very expensive especially where the quantity of oil produced is small, the wells deep and where the annular space between tubing and casing or walls of the hole is large. The quantity of air or gas for flowing under these conditions is necessarily large. The proper design and use of jet nipples or orifices in a small syphon line run in the tubing reduces materially the quantity of air needed.

Walker[6] in his tests on lifting water from gas wells showed that in a well 1750 feet deep with a fluid head of 42 feet water could be lifted at the rate of 33.28 gallons per hour with gas at at rate of 480 cubic feet per hour, which is a ratio of about 607 cubic feet of gas per 42 gallons barrel water. This was accomplished with a starting gas pressure of 155 pounds and a 1/16-inch jet placed 100 feet off bottom in a ¼-inch syphon line.

However, even with efficient air or gas lifts for producing small wells the costs will be high. High pressure air or gas lines will be required for each well so operated and separators for gathering the discharged gas will be necessary at least for small groups of wells if not for individual wells.

The complicated system of air or gas recovery combining all phases of producing both oil and gas makes it necessary for complete co-operation of all departments. Also in most fields it will be necessary for all operators to co-operate in restoring pressure. Because of their migratory nature neither oil nor gas can be easily confined within the surface boundary rights and they may be forced across property lines.

The pool should be developed as a unit to prevent waste of both oil and gas and to curtail an economic waste. The various property and royalty owners should group their holdings each taking his prorata share of stock in the unit company or any other equitable division of the oil and gas produced.

[5]E. O. Bennett and K. C. Sclater, "Volume and Pressure Control for Wells on Gas-Lift." Delivered before the annual meeting American Institute of Mining & Metallurgical Engineers at New York, February 14 to 18, 1927.

[6]Morgan Walker. "Dewatering Gas Wells by the Gas Lift." Mining and Metallurgy, March 1, 1927, Volume 8.

Magnolia Increasing Line Capacity from Oklahoma

Dallas, Texas.—Trunk line capacity of the Magnolia Pipe Line Company leading south from Oklahoma to the Gulf Coast is to be increased to a maximum of 50,000 barrels daily through the construction of loops on the main line in Southern Oklahoma. Magnolia's present system out of Oklahoma is rated at 32,000 barrels daily capacity, while the construction of 54 miles of eight-inch pipe loops between Addingston and Maud stations will boost the daily facilities by 18,000 barrels.

Magnolia's daily crude runs from Oklahoma have been in excess of pipe line facilities since January, and during February and March the daily runs from Oklahoma and Kansas were double that of pipe line outlet. Magnolia's daily average crude runs during April from Oklahoma and Kansas amounted to 52,069 barrels.

Three separate loops are to be strung in Southern Oklahoma by Magnolia, including 15 miles of eight-inch between Addington and Duncan stations; 26 miles of eight-inch between Duncan and Purcell; and 13 miles between Purcell and Maud stations. A De La Vergne engine and National Transit pump will be added to the pumping equipment of each of the above four stations. Magnolia has ample room in its trunk line from North Texas to Beaumont, but will install a Worthington centrifugal pump at the Bowie station, Clay County, to increase pumping facilities. This new pipe line capacity is scheduled for completion within 60 days.

Montana Runs

Casper, Wyo.—Pipe lines operating in Montana report deliveries of 546,717.28 barrels in March. Of this quantity, the Continental Oil Company handled 72,668.37 barrels through its line at Cat Creek and the Illinois Pipe Line Company handled the remainder through its lines from the Kevin-Sunburst field.

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Pleasant Hill Extension Well Stops Flowing

SHREVEPORT, LA.—Moffitt et al's Moore 1, section 5-9-12, recently completed as a 600 barrel extension to the Pleasant Hill field, of Sabine Parish, ceased flowing during the early part of last week and promptly brought on much speculation as to the future possibilities of the field in this direction. However, these discussions were shortly settled when the well came back flowing at the rate of 200 barrels a day, after a string of two-inch tubing and a packer had been set on bottom. It has flowed continuously since that time, although it shows a steady decrease, and is now producing only 100 barrels each 24 hours.

The Arkansas Fuel Oil Company, discoverers of the field, continues to manifest belief in the future possibilities of its holdings, the largest in the field, and they are erecting derricks and moving in rigs on all offset locations. Both the Arkansas Fuel Oil Company and the Magnolia Petroleum Company have made locations offsetting the Moffitt extension. The Arkansas is also starting work on four locations which have been made in the vicinity of the discovery well, in section 33. This company has already completed four wells in the field, all of which were producers. Total production from the four wells is now approximately 400 barrels a day. Several other important tests are now under way in the field, including the Louisiana Oil Refining Corporation's well, in section 28, three-quarters of a mile northwest of the Arkansas' discovery well. This test is now drilling at 1900 feet, and should be ready to set casing by the latter part of the week. Woodley Petroleum Company's Robinson test, section 33, a direct southern offset to the Arkansas Fuel Oil Company's Logan 4, and located within one-quarter mile southeast of the same company's discovery well, is coring for casing seat below the 3000 foot level. Magnolia Petroleum Company's Hall 1, in section 33, approximately three-quarters of a mile southwest of the Arkansas Fuel Company's present producing wells, and about the same distance west and southe of the Woodley Petroleum Company's test which is now drilling, has been shut down for fuel at a depth of around 1700 feet. This will probably be the most interesting of the future tests to be made for the reason that it is situated in the approximate center of all operations now under way, being flanked on the northeast, as noted above, and on the north by the Louisiana Oil Refining Corporation's well, while it is on a direct line with the Arkansas Fuel Oil Company's Logan 1, discovery well, and the Moffitt et al's Moore 1, extension well, located approximately one and one-quarter miles southwest.

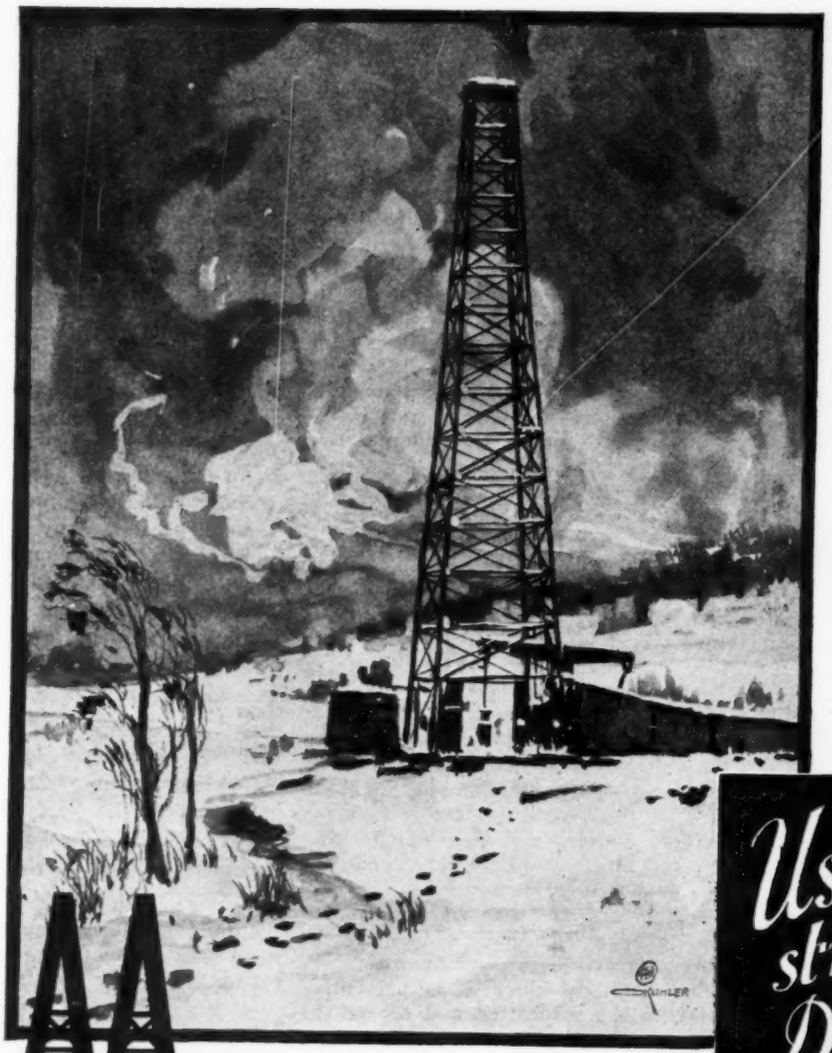
W. M. Sebastian Syndicate's D. H. Sebastian 1, located in section 11-10-13, De Soto Parish, about five miles north of the Pleasant Hill section, of Sabine Parish, bailed dry last week at a depth of 3014 feet. Only a slight show of apparently dead oil was reported at this depth. Arrangements are now being made to make a test of 26 feet of sand which was logged after the well was deepened to 3080 feet, the present total depth. This sand is said to be 130 feet higher than the sand in the pleasant Hill district wells.

Carterville

The Carterville area, of Bossier Parish, registered two completions last week, both of which were successful, in so far as gas production is concerned. The Louisiana Oil Refining Corporation brought in its Blanton well, in section 23-23-12, for the second time, as a 25 million foot gasser. The gas production is accompanied by a slight spray of oil and salt water, neither of which is in quantity worthy of attention. This well recently created considerable excitement among local operators when it was brought in with a large spray of oil, variously estimated at from 500 to 3000 barrels a day. It was later subjected to more complete tests, however, and the oil production completely disappeared. During the progress of these tests, the well got beyond control and blew wild for several days, making it necessary to set a string of smaller size casing in the hole to eliminate the leaks which were created in the larger strings by the action of the sand and gas during the time that the well was blowing wild. The second completion was accomplished at the same depth, 3091 feet, without mishap. Ramsey et al's Robinson well, in section 22-23-12, located in the center of the 40-acre tract adjoining the Louisiana's Blanton well on the west, was also completed last week as a 25 million foot gas well, from a depth of 3099 feet. The same oil and salt water spray is present in both wells. The bringing in of these wells eliminates all hope of an oil field in this vicinity, for the present at least. Future tests drilled to greater depths, or possibly those in process of being drilled in other parts of the field now, may be productive of oil. But, for the time being, this area will be considered as gas territory only.

Arkansas

Considerable excitement is originating from the Urbana-Lawson section of Union County following several recent showings of oil in wildcat wells. The Rovenger Oil Corporation has discovered a very promising looking sand in its McCain 1, in section 4-17-14, at a depth of 2828 feet. A recent test of this sand, made with a Johnson sand testing tool, revealed the presence of oil in sufficient quantity to warrant setting casing for a more complete test. No salt water has yet been noted. Casing has been cemented above the sand and the well will shortly be tested for the third time. The first test was made at 2610 feet, where salt water was the result. The second test was made at 2751 feet, following a gas blowout, and resulted in a 25 million foot gas well. This well is in strictly wildcat territory, and for that reason, as well as the fact that the Ohio Oil Company recently had several favorable showings of oil in a test drilled to the 3000 foot level in this vicinity, it is creating a great deal of interest among local oil operators. The Garrett-Modisette Drilling Company's Union Saw Mill 1, in section 7-18-13, is sharing in the excitement with the Rovenger's well, following its actions when bailed late last week. First reports from this well indicated that it would probably only add another name to the present list of salt water holes drilled in the Lawson sector during recent months. This list already numbers several, including three drilled a short time ago by the Superior Oil Corporation. However, latest reports are more encouraging since they are to the effect that the well began showing heavy oil after having been bailed down to a depth of 3000 feet, where the hole was standing 900 feet in hot salt water. This heavy oil showing increased as the well was bailed, and everyone now seems to be optimistic as regards the outcome of the well. The Marine Oil Company is scheduled to make a test of its Winn Estate B-1, in section 10-8-13, in a few days. The hole has been carried to 2690 feet, at which point a very encouraging showing was had.



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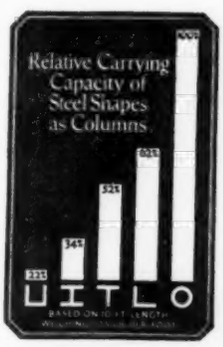

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Say you saw it in The OIL WEEKLY

Officials Decide on Curtailment at New York Meeting

(Continued from page 27)

would not be inconsistent with the public interest.

Agreement on Seminole

"In so far as the Seminole situation itself is concerned, it was decided that the companies present would not start or complete any wells during the next two weeks in the greater Seminole area, except such as may be necessary, and that Ray H. Collins of Tulsa, Okla., be appointed as an umpire or arbiter to determine the necessity of any such wells and that the companies would be governed by his decision. Mr. Collins is also to be requested to make a survey of the field and assemble data as might bear on a further restriction of drilling therein, and report his recommendations to a further meeting to be held here on May 25."

The meeting was attended very generally by the executives of the producing and purchasing companies operating in the Seminole field, those present being Henry Dawes of the Pure Oil Company, Judge Gaster of the Empire Gas and Fuel Company, W. M. Irish of the Atlantic Producing Company, H. F. Sinclair of the Sinclair Producing Company, Mr. Jacobson of the Amerada Oil Company, George S. Davison of the Gulf Oil Company, J. E. Van Eck of the Roxana Petroleum Company, Amos L. Beaty of The Texas Corporation, E. L. Shea of the Tidal Oil Company, W. S. Fitzpatrick of the Prairie Oil and Gas Company, H. L. Pratt of the Standard Oil Company of New York, R. W. Stewart of the Standard Oil Company of Indiana, J. E. Dunn of the Barnsdall Oil Corporation, James Vessey of the Carter Oil Company, and others.

George H. Jones, chairman of the Standard of New Jersey, was among the other officials who attended.

U. S. Board Proffers "Advice and Counsel"

(Continued from page 28)

possible, and, since the operator himself is almost never in a position to store and keep his own oil, the whole output is thrown upon the market.

"This principle of intense forced competition among oil producers on small tracts is a part of the very fabric which the petroleum industry weaves in its operation. It is even written into the leasing laws under which the federal government disposes of its oil bearing lands and the oil bearing lands of its wards, the American Indian. Yet if it could be eradicated, overproduction, with its attendant almost unbearable evils, could certainly be ameliorated. It can scercely be hoped that the federal leasing laws will immediately be changed, but may not wildcatting practice be modified so as to escape some part of this scourge of flush oil in periods of overproduction?

"We now come to the real purpose of this communication, namely to suggest for the consideration of your distinguished board a plan of procedure which, if it is viewed with favor by you and you were willing to announce to the industry that a procedure of the general character indicated would have your approval, would, we believe, accomplish some very real results in the conservation of our oil resources.

"The procedure which we have to suggest is that instead of the interested producers purchasing full interests in definite subdivisions of the wildcatter's block of acreage they purchase undivided fractional interests in such block of acreage. Suppose, for example, ten operators, including the wildcatter, thus come to own the entire block and the test well in common. Suppose the enterprise be managed through a committee or board representing operators and royalty owners and each participant reserves the right to claim his 10 per cent of the oil from every well that may be drilled on the property. Would not this course end the mad scramble whereby each operator now feels obliged to drill as many wells as possible and to produce as much oil as possible before his competitors beat him to it? Would not the procedures in this simple fashion eliminate this greatest obstacle to the intelligent development of production?

"We feel quite sure you will appreciate that the usefulness of this suggestion is largely dependent upon the medium through which it is presented, first, to the wildcatter, and second, to the operators with whom in the past he has dealt. Your board, if it feels the proposal contains practical promise, is without question the authoritative source to focus immediate attention on this possibility, and we trust, therefore, that you will look upon it with favor.

"Yours very truly,
(Signed) "W. C. Teagle,
"W. S. Farish."

Russian Exports

Washington. — Oil production and exports of the Soviet Union for the first six months of the current fiscal year (October 1 to March 31) set a new high record, according to figures published by the Soviet Union Information Bureau here.

Production was 4,925,390 metric tons, which is 30 per cent greater than the same period of last year, and seven per cent greater than the six-month's production of 1913.

Exports, totalling 887,000 metric tons, surpassed those of the same period last year by 43 per cent, and were nearly equal to the exports for the entire year 1913, which were 914,-032 metric tons.

At the present rate of progress it is predicted that Soviet oil exports for the entire current year will be double those of 1913.

Slowing Down Rocky Mountain Operations

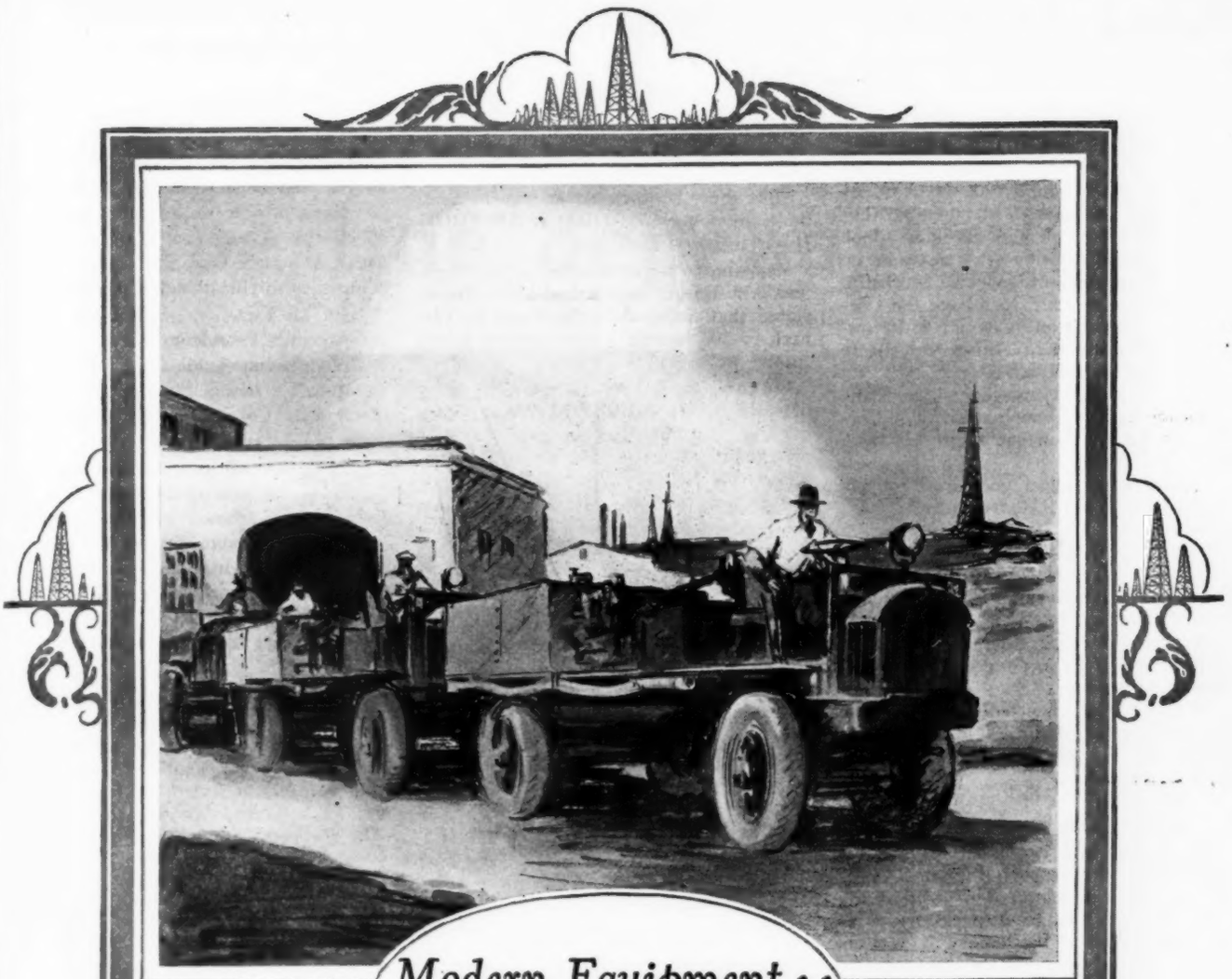
Casper, Wyo.—Reduction of the posted prices of crude petroleum at the wells and large quantity of refinery stocks in storage is having its effects on drilling operations and refinery production. There is a general feeling among the producers and refiners that a curtailment of operations should follow.

Producing companies are confining their operations mainly to wildcatting in the Rocky Mountain region. No new wells were being started in proven territory except those necessary to comply with lease requirements. On the other hand, many of the more important producing companies are stepping out and testing all of the more likely structures and even extending their wildcat operations to practically every State in the Rocky Mountain territory.

As an example of curtailment of drilling operations in proven fields, Midwest Refining Company laid off 140 men in the Salt Creek field last week and has also laid off a number of men holding clerical positions in the company's Casper offices.

Standard Oil Company of Indiana and Midwest Refining Company have reduced the daily runs at all plants in the Rocky Mountain territory. Works of both companies in Casper have reduced daily handlings of Salt Creek crude from 38,000 barrels to 20,000 barrels. These companies have also laid off 400 men since May 1. Management, however, states that it expects this condition to be temporary and hopes to reinstate most of the employes at an early date.

Crude shipments continue to be increased from Wyoming fields to refineries of the Imperial Oil Company, Ltd., in Canada. Mule Creek field, in Eastern Wyoming, which has been shut down for more than a year, has been placed on production again and the Ohio Oil Company is shipping crude from this field to Calgary as well as the output of the Lance Creek field. Ohio Oil Company, Carter Oil Company and Producers & Refiners Corporation are shipping large quantities of Salt Creek and Big Muddy field crude to Regina and Calgary. Producers & Refiners Corporation started early in the month on filling a contract to Calgary of 150,000 barrels of Salt Creek crude which is being loaded out at the company's loading racks in the town of Mills, Wyoming. Ohio Oil Company is just completing a shipment from its Illco station near Casper of 300,000 barrels to both Regina and Calgary.



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Say you saw it in The OIL WEEKLY

Seminole Shutdown Starts With Unanimous Approval

(*Continued from page 26*)

which he styled, "one of real curtailment."

"Let's test the cooperation of those companies in Seminole," he said, "The Corporation Commission of Oklahoma has sat in judgment on the Seminole pool. It has made no decision yet. Instead of a policy of curtailment for two weeks to see what can be done, let's have the Corporation Commission issue an order restricting the output of Seminole wells to a maximum of 200 barrels per day.

"Have it to apply to the whole State. You have it within your power. The Corporation Commission can issue the order effective Monday."

"Would you subject your own properties to that?" asked Henry McGraw, vice president of the Gypsy Oil Company.

"Yes sir," Brennan replied.

"I hardly believe it," McGraw answered, "from some conversation I have had with Mr. Reeser."

That brought E. B. Reeser, president of the Barnsdall Oil Corporation, to his feet with this statement:

"We will whole heartedly shut in every well we have to 200 or 100 barrels, for as long as the Corporation Commission considers it necessary."

Past Discord

Mr. Reeser then explained that he had come to the meeting intending not to take part in the discussion. The turn of affairs, however, made it necessary. He then gave some of the history of past efforts to curtail Seminole development and placed his own company on record as not being willing to abide by the present effort.

"Last November," he continued, "we were in accord with the exception of one member of the committee. Later efforts found some one else not in accord. Each time we met the Sherman law was held up as preventing concerted action. Now, however, some men meeting in New York have decided the Sherman law offers no handicap. Why this sudden change in attitude?

"I understand the secretary of our company was present at the meeting in New York and voted in favor of this effort. So we are morally bound to abide by it for two weeks. But after two weeks I inform you that we will not abide by it and we are not now in sympathy with it.

"When previous efforts failed, the Barnsdall Company made preparations to handle its leases in that pool. We are going ahead with the drilling program."

He then quoted figures to show the unfairness of any curtailment at this time. His own company, he said, while drilling about 10 per cent of the wells in the greater Seminole area now, has but five per cent of production. He cited the Turman Oil Company as having 11,000 barrels daily production, with no wells drilling.

Branded as Unfair

"Any shut down now is unfair. It is all very well to meet and talk shutdown to placate the public or influence a stock market.

"But there is work under way at Seminole involving $35,000,000 or $40,000,000. It has to go on now."

Replying to a question from Mr. Brennan, Mr. Reeser said it had been demonstated that Seminole wells could be held back to 200 barrels a day without injury to the wells.

"In California," he added, "they have between 80,000 and 90,000 barrels of production shut in. Wyoming has a shut in production of between 60,000 and 100,000 barrels daily.

"While these men met in New York, some of their companies were preparing to rush a pipe line into West Texas to tap another rich area. This effort has no consistency behind it."

W. C. Franklin, vice president of the Tidal Oil Company, made a plea in favor of the shut down effort on the score that it offered some hope, while anything else offers none.

"We are at the forks of the road," he said. "One way leads to governmental action. If we take that fork, we can never turn back. Nothing can be more serious than seeking governmental control.

"What these men in New York have done is intended as an opening wedge. They are hoping to reach a solution. It is not perfect and it may not work. But at least we can back up and try some other plan, if it fails. It can not hurt anybody in two weeks."

Opposed to Government

Henry McGraw called attention to the necessity of unanimous approval for the working of any scheme and pointed to the fact that some of the holders of important leases were absent. Later he made some pointed remarks concerning the proposal to have the Corporation Commission issue an order restricting well output, saying:

"The business I represent is a private business. My position is that of a trustee. The stockholders believe they are competent to manage the business. For that reason they will oppose any movement to turn the management over to the government."

On the proposition of further effort to curtail development, he said, "we can prevent the spread of the pool. On that score we are willing to cooperate up to the point where no damage will result. We are willing to hold back."

He cited instances of agreements between his company, the Gypsy, and others, where wells have been halted, others will not be started, and where others, in one instance a wildcat, is being pinched in to 100 barrels a day and the offsetting lease holder has agreed not to drill as long as the output is held down like that.

Dana H. Kelsey, vice president of the Prairie Oil & Gas Company said his company had 12 or 13 wells drilling in Earlsboro and would be willing to reduce this to two or three, if it can be worked out through the umpire.

Change Suggested

"The Prairie Oil & Gas Company," he added, "has been willing at all times and is willing now to do anything possible to check the development of the Seminole area. We have been working with other companies to curtail development."

John M. Lovejoy, general manager of the Amerada Petroleum Corporation., said it would be impossible for his company to agree to restricting Seminole well output through the Corporation Commission since it would mean financial loss.

"What the oil companies should do," he added, "is to stop the practice of buying acreage around wildcat wells. Instead of acreage, undivided interests should be taken in wildcat ventures. With undivided interests, it would be a simple matter to restrict drilling, since no property lines would have to be protected."

The only indication of the attitude of several companies toward striving to curtail Seminole development came through the vote on the resolution. Those voting for the resolution were Amerada Petroleum Corporation, Gypsy Oil Company, The Philmack Company, Pure Oil Company, Turman Oil Company, Denver Producing & Refining Company, Atlantic Oil Producing Company, Mid-Continent Petroleum Corporation, Carter Oil Company, Sinclair Oil & Gas Company, Roxana Petroleum Corporation, Independent Oil & Gas Company, The Texas Company, Tidal Oil Company, Prairie Oil & Gas Company, Superior Oil Corporation.

Those present but not voting were Barnsdall Oil Corporation, Shaffer Oil & Refining Company, Mid-Kansas Oil & Gas Company, Minnehoma Oil Company.

Companies having wells drilling in the area but not represented at the meeting included, Empire Gas & Fuel Company, Indian Territory Illuminating Oil Company, Phillips Petroleum Company, Marland Oil Company, Pierce Petroleum Company.

Building Tanks

San Angelo, Texas.—The Landreth Production Corporation has purchased three 55,000-barrel steel tanks from the United Iron Works to be erected immediately on the lower end of the Church & Fields area, Crane County, where Landreth is starting a half dozen tests on a long strip of land separating the Church & Fields area and the Gulf-McElroy producing property. The first of the trio of new tanks are to be ready to receive oil at the time the first completion is made by Landreth. Ed. Landreth is president of the Landreth Production Corporation, and headquarters are at Breckenridge, Texas. The oil is to be stored for better crude prices.

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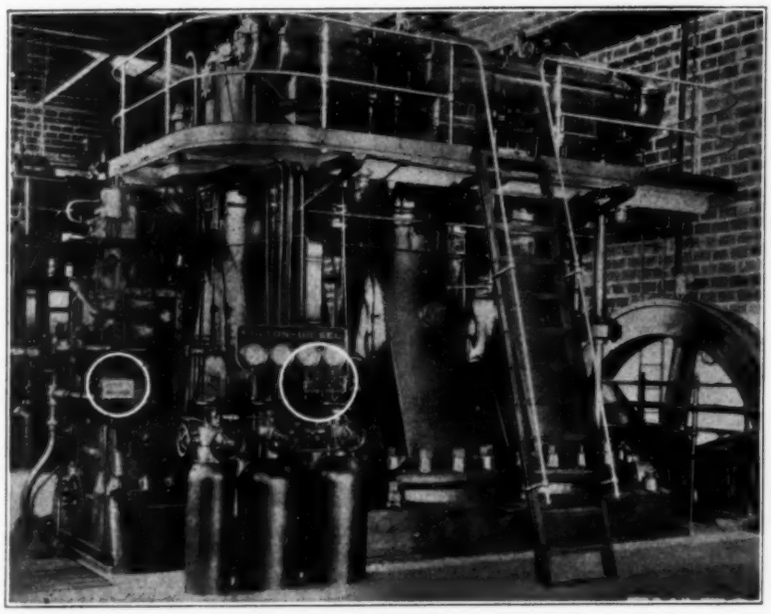

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Colorado Wildcat Shows Oil

Denver, Colo. — Poudre River Oil Company has made a very encouraging strike in the hole it has been drilling for two years in Larimer County, Colorado, northeast section 33-8-69, at 3328 feet. This test is backed by Fort Collins people who are wildcatting for the first time. Recently the officials were informed by geologists that there was no structure apparent at the location, and although very discouraged, decided that inasmuch as the total depth was then 3200 feet, it would be wise to drill deeper. Sample of the oil shows it to test 27 to 28 Baume, it is black and gives off a most pronounced gasoline odor. When the oil was encountered the test was shut down pending the arrival of a drilling expert who should advise the operators "what to do next." Whether a test of the sand at the present depth will be made, or whether it will be drilled deeper has not as yet been decided. The well is in an entirely new sand and if the production is commercial, the discovery will be of considerable importance.

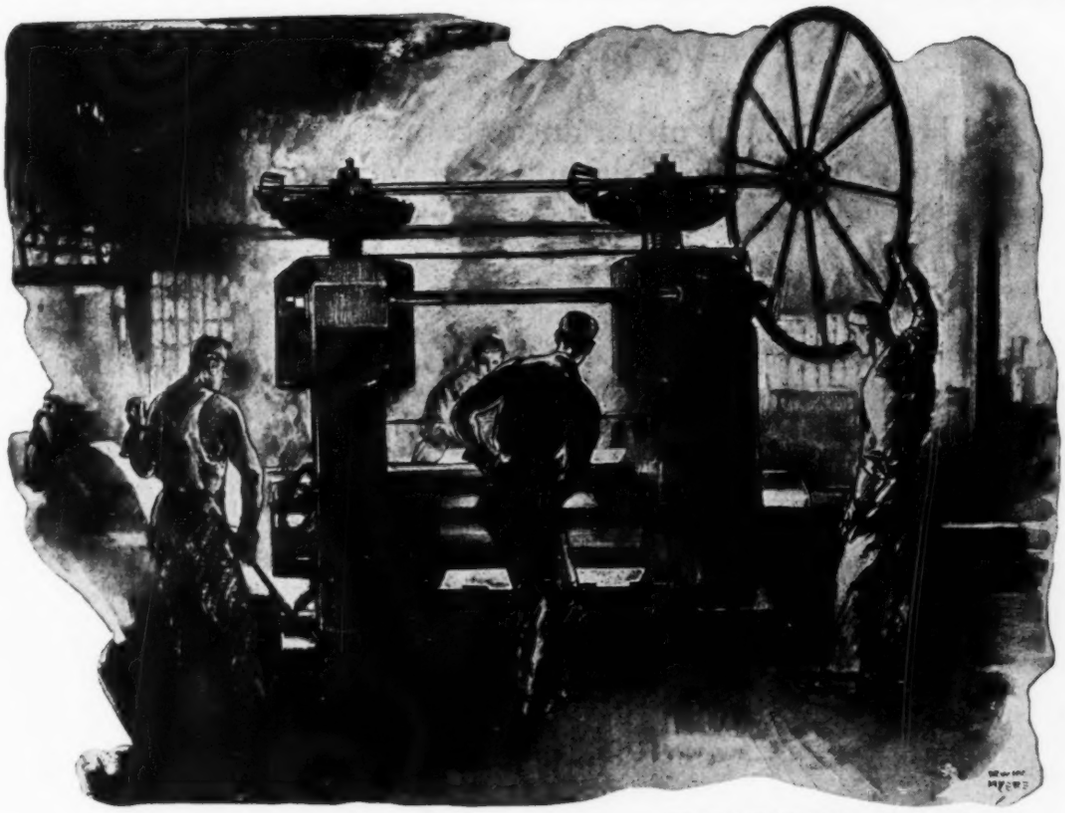
Re-Open Mule Creek

Casper, Wyo.—Mule Creek oil field in northeastern Wyoming was re-opened this week and oil started running from the lines of the Ohio Oil Company. Price of $1.10 per barrel has been posted. This field has been shut down for the greater part of the year; production is controlled by the Argo Oil Company and the Ohio Oil Company, and is being shipped to refineries in Canada.

West Texas Production

	Prod. Wells	Daily Average
Crane County		
Church & Fields—		
Humble Oil & Refining Company	8	8,230
Simms Oil Co. & Atlantic	10	6,770
Eastland Oil Co.-Collett et al	4	5,460
Tidal Oil Co. Turman Maxwell	8	5,015
Gulf Production Company	7	3,180
Independent Oil & Gas Company	1	1,390
Geo. Church & Bert Weekly	1	1,280
Carl Cromwell & Pickrell	1	905
Magnolia Petroleum Company et al	12	490
Prairie Oil & Gas Company	7	445
Geo. Church & Fields	1	135
Stidham & Thrasher	1	10
Totals	61	33,310
Gulf-McElroy—		
Gulf Production Company	20	10,825
Marland-Hughes—		
Marland Oil Company et al	18	1,180
The Texas Company	10	370
McMan Oil & Gas Company	2	150
Independent Oil & Gas Company	1	10
Totals	31	1,710
Totals for Crane County	112	45,845
Upton County		
Roxana Petroleum Corporation	30	3,830
Dixie Oil Company	27	3,450
Marland Oil Company	79	3,385
T. P. Coal & Oil Company	11	2,575
Independent Oil & Gas Company	25	1,245
Prairie Oil & Gas Company	5	1,055
Gulf Production Company	11	495
The Texas Company	16	490
Amerada Petroleum Corporation	5	370
Humble Oil & Refining Company	6	230
Sun Oil Company	10	215
Wentz Oil Corporation	3	160
Simms Oil Company	3	130
Republic Prod. Co. & Marland	5	125
Atlantic Oil Producing Company	1	35
Texon Oil & Land Company	1	25
McMan Oil & Gas Company	1	10
Totals	239	17,825
Pecos County		
Mid-Kansas & Transcontinental	6	*7,860
Texon Oil & Land Company	1	10
Totals	7	7,870
Reagan County		
Big Lake Oil Company	109	19,640
Texon Oil & Land Company	74	7,330
Totals	183	26,970
Winkler County		
Gulf Production Company	1	*1,020
Southern Crude Oil Pur. Company	2	*750
Totals	3	1,770
Jones County		
Phillips Petroleum Company	8	1,170
Marland Oil Company	3	625
Mid-West Exploration Company	4	380
Atlantic Oil Prod. Co. et al	1	55
Totals	16	2,230
Mitchell County		
The California Company	85	2,725
Magnolia Petroleum Company	19	635
Atlantic Oil Producing Company	8	315
Eastland Oil Company et al	9	320
Tidal Oil Company	2	25
Fred Carey et al	1	15
Totals	124	4,035
Howard County		
Marland Oil Company	32	1,660
Magnolia Petroleum Company	22	800
Reeves & Apperman et al	2	180
Bristow & Merrick	2	135
Lockhart & Co. et al	5	85
Pure Oil Company	1	300
Humble Oil & Refining Company	2	50
Tidal Oil Company	2	45
Mid-West Exploration Company	1	25
Comet Petroleum Company	1	20
Dixie Oil Company	1	20
Gulf Production Company	2	20
Totals	73	3,340
Crockett County		
Humble & Marland Oil Company	9	770
J. K. Hughes Development Co.	4	245
Republic Production Company	2	240
Gulf Production Company	6	150
Carl Cromwell	4	145
Humble Oil & Refining Company	2	55
Roxana Petroleum Corporation	1	20
Totals	28	1,625
Glasscock County		
Marland & Texon Oil & Land Co.	1	35
Scurry County		
Northwest Company	4	25
Ector County		
J. S. Cosden et al	1	15
Loving County		
Lockhart & Company	1	15
Garza County		
Emerald Oil Company	1	5
Grand totals past week	793	111,605
Grand totals previous week	776	117,678

*Production pinched.



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What Does an Oil Scout Do—and What For?

His function is important to company operation and he must be variously informed and a true diplomat

By RUFUS J. PILCHER

WHAT is an oil scout and what does he do? A question often asked by the layman.

A scout, according to Webster, is "one sent out to gain tidings; especially to listen," since the word itself has been derived from the old French verb escoute, to listen. The term "scout" in its original and ancient useage has essentially a military application, wherein the bearer of the name was the eyes and ears of his army.

Just when the oil industry pre-empted the title is not clear, but at any rate it has, and although it has broadened considerably the duties of the position, still a scout is fundamentally what the ancient French word implied —a listener.

So important has his function become that few oil companies attempt to operate without one scout at least. The majority have several. Some of the larger operators have as many as 25.

What the Public Thinks

How little the public outside of the oil business really knows about scouts is illustrated by an experience of a scout for one of the well known oil companies.

He was arrested for speeding by a motor cop, who in asking the usual questions inquired what his occupation was.

He replied, "I am an oil scout," at which the motor cop said:

"What the hell is an oil scout? I've heard of bootleg scouts but I never heard of an oil scout."

The scout replied that his job was to keep his company informed as to the new developments in the oil business. At which the motor cop retorted, "All right tell me where the next oil field is going to come in and I'll take care of you for life on speed tickets."

The usual answer to the question, "What does a scout do?" is often made by the scout himself. "A lot," and he lets it go at that. He is usually either overmodest or hasn't the time to go into detail of his multidinous duties. This modesty on the part of the average scout and lack of inclination to sound his own horn, while meritorious, does little toward elevating the profession, so doubtless a little of the fervent light of honest publicity shed upon scouting might, react a little to the advantage of the scout.

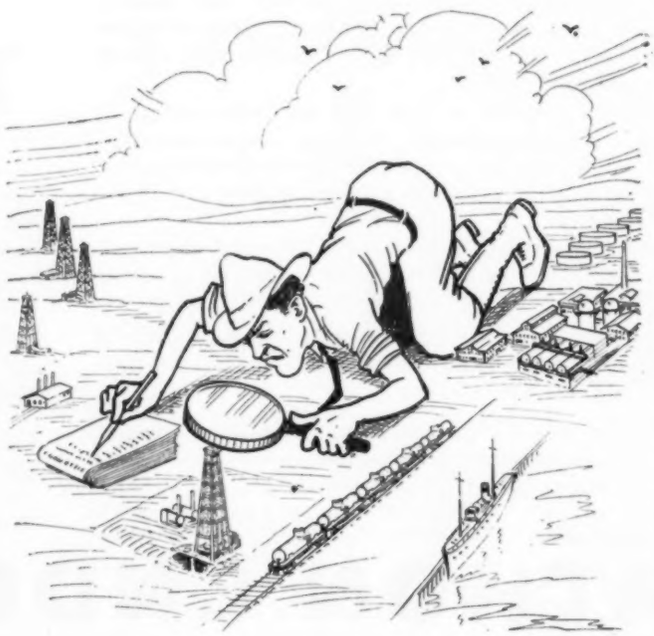
Geologists' Escoute

Geologists would say a scout is first a man with technical geological training, with a broad knowledge of the geology of the region he works in, and should of necessity be well advised as to stratigraphy, paleontology and other technique. In military phraseology, "he should know his terrain." He is the exploration scout and is called, in the parlance of the game, a "rock hound."

The petroleum engineer would say that he should possess the same theoretical knowledge, to some degree, as the "rock hound." But along with this he should have a working knowledge of both the underground geology as developed by drilling in the producing fields of the region in which he works, as well as familiarity with all the tools and facilities used in development and production. He is designated as a "mud smeller," which name is acquired from visiting the wells to inspect formation samples brought up by the drill.

In late years, coincident with the development of the core barrel, the "mud smeller" has had his sampling work reduced to a more exact science. Previously, before the introduction of the core barrel, bit or ditch samples were unreliable, because their source was always questionable. Now core samples of formations are secured from known depths and often require microscopic or chemical examination in order to correlate with material from other wells, or for a possible determination of the age of the rocks in which drilling is progressing.

The more paleontological knowledge this type of scout possesses the more valuable he is to his superiors, because quick decisions can be arrived at on the ground and the time loss of laboratory tests often avoided.

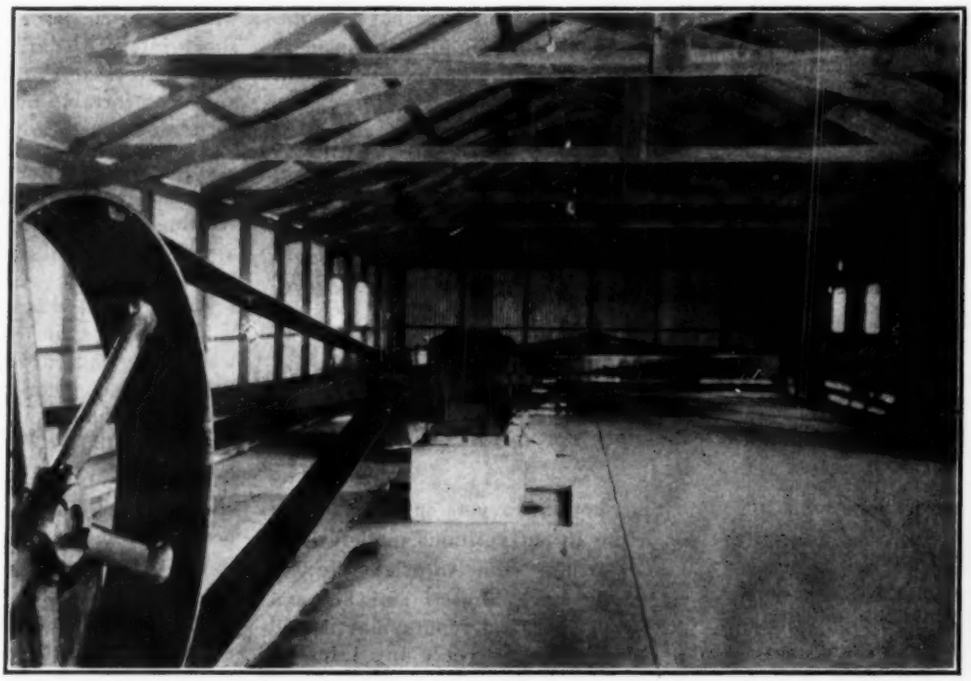


Pipeline Scout

The pipe-liner would define the scout as a man who has risen from the ranks of gauger, or pipe line engineer with an intimate knowledge of oil handled in the field—how the wells or leases produce and what becomes of that oil; whether it leaves the country by pipe line, railroad or tanker. In addition to which he must know the wells that are drilling, both in producing fields as well as wildcats and interesting edge wells, in order to keep his company informed that they may be ready with pipe line facilities to contract

You "Dopesters" Be At The Dallas Jubilee May 23-24

Electrifying OIL PRODUCTION



Humble Oil & Refining Co.'s Band Wheel Power No. 1, G. C. Kent lease, Powell Oil Field, pumping 22 1640-ft. wells with a 60 H. P. Squirrel Cage Motor.

Service in Many Texas Fields

Prominent oil producers in several important Texas fields have electrified their pumping and drilling operations through the service of Texas Power and Light Company or Texas Electric Service Company. Since the discovery of Burkburnett field, we have furnished electric power for well pumping, pipe line pumping and drilling. We are also serving the Powell, Lockhart, Luling and Chalk fields, the latter being our most recent extension. We'll soon be serving Ector, Crane and Winkler Counties. Electrification of pumping reduces shut-down time materially and thereby increases production per well. Drilling costs are cut 70% and more. Write us for comparative figures.

Texas Power & Light Co.

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for and take the oil when the wells are completed. There is no particular slang name by which this scout is designated. The terms "rock hound" and "mud smeller" are sobriquets originally applied by drillers to technical college geologists whom they regarded as nuisances. The pipe line scout, rising as he did usually from the ranks, was considered already within the fraternity. To him no sarcastic epithet was applied

The casing-head producer's idea of a scout is a man with many of the qualifications of the pipe line scout, but who also embraces a knowledge of his particular phase of the production game.

The land department would call a scout a man who was a natural born "Trader," since he often must make terms on the ground, wide awake as to land ownerships in promising wildcat territory or in new producing fields, and that he should be a law student or have a good working knowledge of contracts, right-of-way, easements and other legal practices of the leasing game. This scout, in oil slang, is a "lease hound."

Debutante Scout

With new methods of increasing production and the introduction of modern machinery and equipment to render production methods more efficient, there is another scout about to be added to the list, who might be designated an "efficiency hound." His duties would call for him to specialize in all phases of drilling and production methods, and involve his watching the introduction and development of new devices and experiments to increase production, or lower the costs thereof. He would be the eyes and ears of the research department, and would keep it up-to-date on progressive innovations. Some refiners do use such confidential agents to good purpose, particularly in California, where refiners appear to keep each other more or less in the dark.

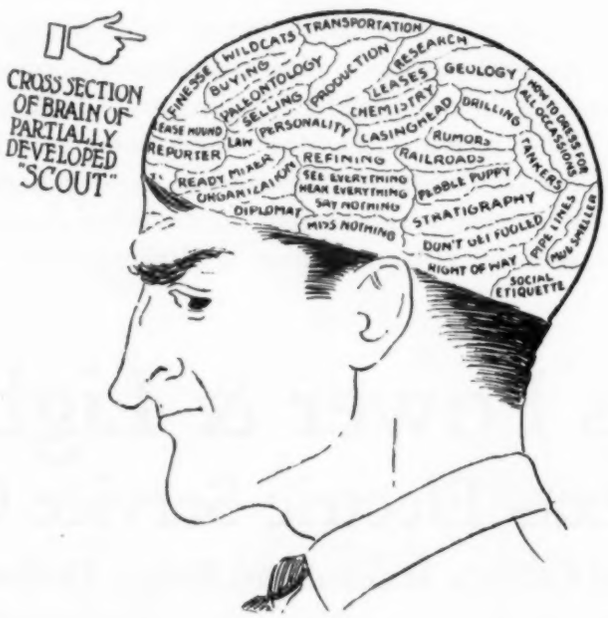
And so on down the line. This does not imply that the oil business is or will become so top-heavy with special scouts as the foregoing might seem to indicate; rather that a scout worthy of the name should embody a working knowledge of all these angles in order to be thoroughly efficient. This article will deal with the best known species of the genus, the "wildcat scout."

Wildcat Scout

Within the oil business the question often arises, "What characteristics go to make up a good scout?" The answer to this question embodies the collective opinion of many men at the top of the list of "dope getters" in California, as well as the experience of scouts of national and international reputation.

Primarily a scout should be a salesman. He must be selling continually that most difficult of commodities to put over, namely, the idea that his competitor should tell him his own business affairs. Necessarily he must be of amiable temperament, broad-minded, an astute diplomat and, above all, persistent. He should have the newspaper reporter's "nose for news," and a keen sense of humor. He must be able to approach all men, from "roughnecks" to presidents. He should ever carry the thought in mind that in scouting there is no such thing as a secret, and providing the information is of sufficient importance, he must get it—and this does not carry the implication of theft.

The scout who gets in the habit of resorting to surreptitious methods will sooner or later come to grief. He will ultimately have himself and his employer in such bad repute that it will be very difficult to get any information. He should have enough resource and finesse to secure the information he desires without having to resort to dubious expedients. Tact, when employed by a scout, is a keen rapier in his hands, whereas theft is analogous to a boomerang. It is doubtful if any oil company has ever materially profited by information secured by questionable methods.



A Free Mud Bath

This point is illustrated by the experience of a well known scout, who spent a chilly night under the rig floor of a wildcat well, waiting to find out when the crew pulled out of the hole with the core sample, whether or not they had oil sand. Although he thought he was undiscovered, the crew was advised of his presence there and continued to wash down the far from water-tight rig floor with cold water at short intervals during their tour. It is not necessary to say that he spent an uncomfortable night and got no information worth while.

Interesting is the experience of another scout who cultivated the habit of stealing core samples when he visited a rig. The drilling crew soon got on to him and put dry core samples out for him to take that came from another wildcat well some distance away, but which they had purposely mislabeled as belonging to their well. Cores from the well in question, rich in oil showings, were hidden.

Frank and above-board scouting, coupled with finesse, is ultimately the best method.

Salted Wells

Many are the pitfalls of the wildcat scout. He must be continually on guard and even anticipate various expedients resorted to by legitimate operators to hide important discoveries, as he must also be alive to the dubious methods of the "fly-by-night" wildcatter seeking advantageous publicity. Not all of these gentlemen are dishonest, by any means, but are prone to allow their desires warp their judgment founded on too little experience. Willful "salting" of a dry hole is not often resorted to any more, but there has been many an oil discovery heralded that was founded on contamination of samples by oil circulated to loosen "fish" in the hole, or from mud used from old sumps. Many inexperienced operators have deceived themselves by permitting fuel and other waste oils to get into their mud pit. This oil when circulated with air sent down the hole with new drill pipe produces a good imitation of oil and gas showing on the ditch.

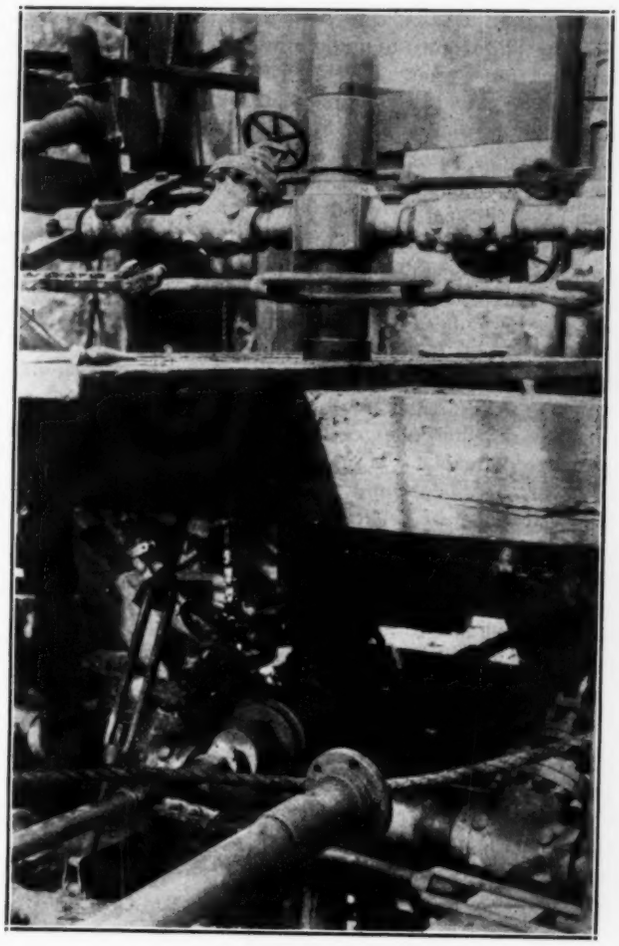
The true scout, like newspaper men and salesmen, is born and not mode. Although if given proper edu-

1600 lbs. Pressure!

—But the C. I. W.

With Exclusive Patented Packing

Blowout Preventer



Photographed in actual operation on the Bordages No. 4 well of the Vacuum Oil Co., Lockport field,

Never Leaked a Drop!

THIS WELL came in with 1600 pounds pressure BEFORE the drill-stem could be removed from the hole. So the preventer rams were tightened around the stem, and the lower manifold put into operation while 4800 feet of drill pipe remained suspended on the rams in the hole.

Later the well sanded up outside the stem. So the second manifold was set up ABOVE the Preventer, and the well came back at the same high pressure THROUGH the drill stem. In either operation the Preventer DID NOT LEAK—PROVING its ability to withstand great pressure from above as well as from below.

IT PAYS to "Be Safe"
With a C. I. W. Blowout Preventer on Every Well!

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HOUSTON, TEXAS

cational foundation with intelligent direction, any man of ordinary intelligence can become a passable scout, with a year or two of experience, it is not likely such a man would ever become a scout par-excellence unless he has those inherent characteristics outlined. A thorough knowledge and ability to analyze human nature is a qualification that usually comes to a man with the philosophy of middle age, although some men develop it much earlier. So that the younger man may make up to some extent for what he lacks in this respect by enthusiasm, the early part of last week and prompt "pep" and everlasting persistence.

Too often oil companies are prone to place the responsibility of scouting on young inexperienced men, doubtless because they do not attach sufficient importance to the job and can hire them cheap. They often delegate the duties to several men of this inexperienced class, when one good man would be more valuable. Many companies, however, are beginning to recognize the desirability of experience in scouting as in their personnel of production or other departments, and are more and more employing men of recognized ability; thus placing the scout in his proper plane of importance.

Impossible Assignments

Some executives, who perhaps have never done dope collecting themselves, are prone to expect too much and to hold a man responsible for a huge mass of information within an area quite beyond one human's capacity. Perhaps a scout's sense of humor should come to his rescue and save the day for him in this case. A scout in line of duty is frequently faced with what seems an impossible assignment, but is never so bad as it seems. Although one may not immediately secure the specific information required, his experience is broadened and he does get something. The harder the task appears the better for the scout. Only skill can secure difficult information; the greenest novice can gather the easily secured data.

As to methods in scouting, that will depend on the individual, tempered somewhat by the general policy of the company by whom the scout is employed, and for that reason no one could lay down any hard and fast rules. There are, however, a few well known fundamentals that the best men agree upon.

The wide-awake scout will play every hunch. He is constantly assailed with rumors, many of which appear so wild that even to the novice they are preposterous. Nevertheless, the wildest of these rumors are often based on a small figment of fact, and are always worthy of investigation. With all known knowledge of geology and oil production, there remains so much underground undiscovered, the oil game is constantly producing new sensations. So much has happened in the past few years to upset the predictions of experts, that only those of little experience have the hardihood to say "impossible." Therefore, no tip is too insignificant to merit investigation.

Personality Essential

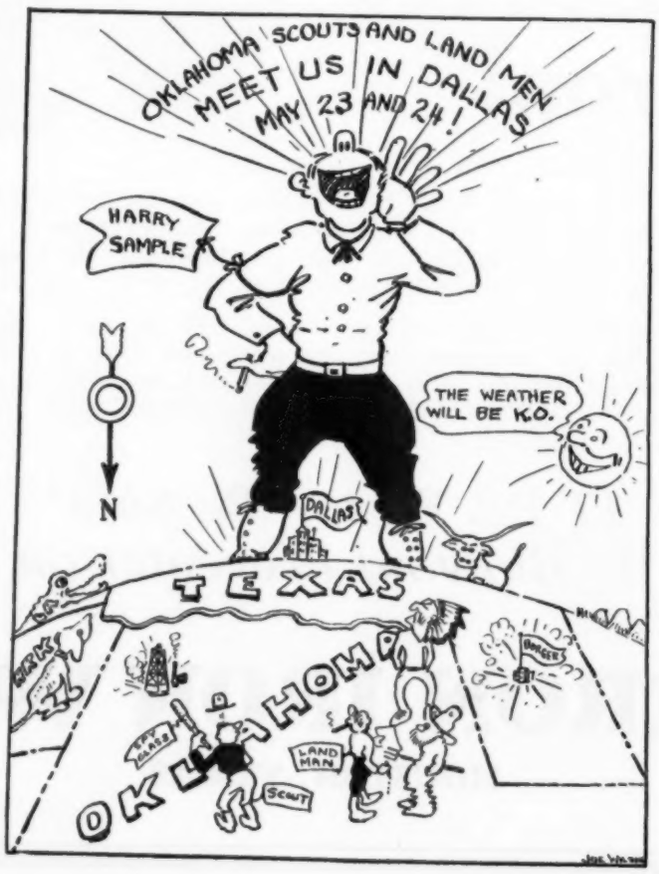
Notwithstanding a great deal of information can be secured by enchange of correspondence and over the telephone, still personal contact is always to be preferred. The scout's best stock in trade is his acquaintance and the breadth of his contact with people who are helpful to him, and should only be limited by human capacity. He should never pass up an opportunity to make a new acquaintance in his business. He must at the same time be a good talker and a good listener, with more emphasis on the receiving end. He may often make a call merely to pass the time of day, without any thought of receiving any directly helpful information, knowing that he may be bored for several hours by some loquacious individual, and feel that he has about wasted the day, when some little hint may be dropped to him that proves an important tip.

It is frequently the case that the field office man to be interviewed or the driller works in an isolated location, where news is scarce and he is necessarily very much interested in other fields and wells. Successful scouts open the conversation by telling these men something new and interesting about these other fields or wells, thereby paving the way very nicely to a discussion of the business nearer at hand. This expedient starts the scout off right by showing that he knows his stuff.

Folly of Mysteriousness

There is a tendency among young or inexperienced men gathering data to act mysterious. One of these misdirected individuals had occasion to call at a wildcat well. Another scout looking for the scout in question, asked the driller if he had seen anything of the boy, and described him.

He said, "Yes, there was a man of that description around here half an hour ago. He did not come in the rig or talk to me. I saw him standing outside counting my drill pipe stands and getting his hands dirty in the mud of the circulation ditch. I don't know whether he found out anything or not. If he had come in the rig and introduced himself I would have been glad to have showed him the log book and given him all the information he needed."



Notwithstanding they like to "kid" the "mud-smeller" or "pebble puppy," drillers as a class are very human and sociable individuals, who are easy to meet and are generally courteous in their treatment of the "dope-getter." Even though they may be under severe instructions not to give out information, if approached in the right manner they can often, by their negative replies or evasions to well-put questions, convey the information desired. A man's denial of an oil showing is often too eloquent to be convincing. In this case they are obeying the spirit of the instructions and depending on the skill of the scout to see through the stone wall. They are, on the other hand, often quick to resent any misguided attempt on the part of the scout to "high hat" or "upstage" them.

Pink Knickers Won't Do

It is not considered good form by the well informed scouts to seek to impress the driller with any profound knowl-

(Continued on page 90)

Dependable Supplies and Service

Here are a few handled by Norvell-Wilder Hardware Company.

BORDEN COMPANY
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Rotaries, Crown and Traveling Blocks

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Unions

JONES & LAUGHLIN STEEL CORP.
Lapwelded Steel Line Pipe, Casing and Tubing

KEROTEST MANUFACTURING CO.
Kerotest Valves and Fittings

LUFKIN RULE COMPANY
Metallic Tapes, Gauge Lines and Rules

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PENBERTHY INJECTOR COMPANY
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Copper Queen Belting, Skoocum Packing

PITTSBURGH STEEL PRODUCTS CO.
Seamless Drill, Casing and Tubing

TOLEDO PIPE THREADING MACH. CO.
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WALWORTH COMPANY
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Supplies of merit, complete stocks, and instantaneous service for the oil fields of the Southwest.

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Say you saw it in The OIL WEEKLY

EARLY MORNING SCENE AT SEMINOLE

"Let's Check" Opens Information Exchange at Seminole

Early morning meeting of scouts provides each of them with complete daily details of operations and production

By GEORGE REID
Staff Representative

EVERY day at Seminole, 9:30 a. m., the scouts foregather. Thirty-five to fifty men comprising the personnel of the scouting departments of all of the operating companies interested in the development of the Seminole area, meet for their morning "check session" in a small building provided for this purpose at the camp of the Carter Oil Company. At this hour every morning parking space for the auto is as scarce in the proximity of the scout headquarters as it is in a large city during the rush hours. Cars of all makes, models and description—not to mention condition—come tearing through the dust or mud from all sections of the Seminole area, each having an energetic dope-getting scout at the wheel, and parking is a matter of first come, first served.

There is no doubt but that the attendance of such a check meeting of the scouts is one of the most interesting forms of diversion for the visitor in an oil field—not only interesting from the viewpoint of hearing the interchange of the all important information which each man reports, but of more interest in the display of good sportsmanship, of the vital energy of the "boys," and the accuracy with which the details of field development is reported. When the checking is over then each member of the session has in permanent records the details of all pipe line runs from the field, the removal from storage or the transfer to storage of all the oil from every lease in the area. Pipe line removals from the field, from station to station, where, and how much—all this is checked by the pipe line scouts.

The oil scouts then swap their dope as to what wells are drilling, at what depth, the showings, if any, the production of new wells for the past 24 hours—with special consideration given to all of those edge wells, or those drilling outside of proven territory. Wildcats come in for special attention and any new development anywhere in the district is certain to be reported during the check meeting—for the guidance of those interested in the area.

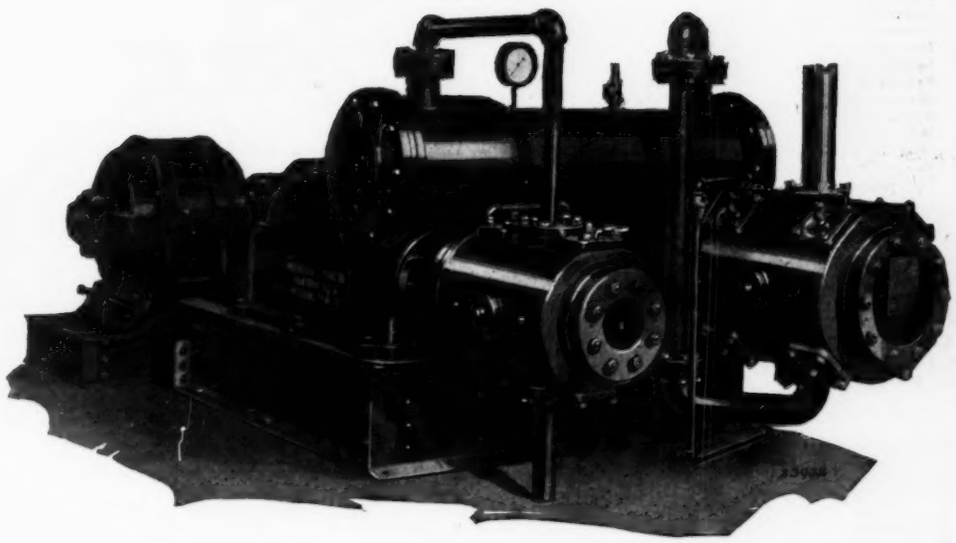
Scout Air Lift

In Seminole the air-gas lift systems are most extensively applied. With 25 to 30 operators engaged in the development of producing methods by air or gas pressure, then the task of securing accurate data regarding the air and gas lift work from the entire territory resolved itself into the matter of seeing some 25 to 30 air-gas lift engineers in one or not more than two days—if the information should prove accurate. With the exception of the scouts themselves—it is doubtful if any one moves about more frequently at Seminole than those men in charge of the air lift work—so the scouts, who are reputed to find out everything, were asked to check the air-gas lift developments of the field, and out of their co-

(Continued on page 94)

Don't Forget The Annual Meeting of Scouts - Dallas May 23-24

Increased Production With Increased Economy



It is an accepted fact that the present high-production records being chalked up in the Western and Mid-Continent fields are due, in a large measure, to the application of air lift, gas lift and pressure system of pumping.

Not only have these systems of pumping increased the rate of production, but oil field experts are agreed that they will greatly increase the ultimate yield of pools with much lower cost per barrel produced. No oil conservation or production program can be reasonably formulated without very careful consideration of the possibilities of these pumping systems.

For a number of years Ingersoll-Rand Company has had its engineers in the fields closely studying the prevailing conditions. They have developed the Type XOB Compressor to meet these conditions.

The Type XOB Compressor is a two-stage unit of duplex construction. This construction gives a flexibility to the machine which can be obtained from no other design.

Different sizes of cylinders have been built for this unit, so that it can easily be adapted to meet any pressure conditions that it is liable to encounter.

These compressors are stocked in local warehouses throughout the oil fields; hence they are ready for immediate delivery.

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881-C

Ingersoll-Rand

Say you saw it in The OIL WEEKLY

United States Daily Average Production

Figures below are taken from the complete revised estimates of the AMERICAN PETROLEUM INSTITUTE except for the current week, which are advance estimates issued by the A. P. I. and are subject to revision;

Month—	Oklahoma	Kansas	Texas (Outside Gulf Coast)	Gulf Coast	North Louisiana	Ark.	Eastern States	Rocky Mountain	California	United States Ave.	Gross
January 1926	449,370	100,130	260,180	90,290	43,990	181,190	101,000	102,300	621,300	1,946,980	60,356,380
February	450,037	101,937	245,989	91,550	45,090	169,676	99,000	98,412	605,250	1,909,637	53,469,836
March	454,762	103,300	260,262	92,712	48,787	164,312	97,625	102,325	604,500	1,929,562	59,816,422
April	467,175	101,825	263,612	88,812	50,562	169,824	100,875	106,675	600,000	1,947,387	58,421,610
May	463,750	105,690	277,700	94,550	58,150	175,430	105,700	112,300	602,720	1,995,990	61,875,690
June	456,450	107,637	302,187	89,912	60,412	167,887	106,250	112,925	606,925	2,013,187	60,395,610
July	456,920	110,320	336,600	114,760	57,460	161,870	104,700	108,520	613,940	2,062,470	63,936,570
August	465,137	111,600	381,550	161,237	56,787	157,375	108,350	110,737	609,725	2,162,662	67,042,522
September	465,387	113,037	402,212	175,512	56,575	154,037	110,125	105,825	598,100	2,180,862	65,425,860
October	497,120	114,720	439,490	170,350	58,200	149,810	109,500	99,060	611,600	2,259,850	70,055,350
November	551,225	115,425	475,987	176,425	56,575	144,100	111,125	93,537	641,325	2,365,475	70,964,250
December	561,012	118,950	483,050	181,263	55,137	139,250	110,375	87,650	659,925	2,396,112	71,279,472
January 1927 . .	591,570	117,490	460,910	176,330	53,030	132,648	108,100	83,910	655,660	2,385,650	73,955,150
February, 1927 ..	683,775	116,200	479,175	154,975	52,850	128,362	107,250	85,237	642,775	2,455,612	69,157,136
March 1927	707,187	115,612	475,375	154,262	51,450	124,662	104,500	87,200	644,350	2,462,625	76,341,375
April 1927	723,820	115,510	476,920	155,420	50,670	114,860	107,500	89,130	643,520	2,477,350	74,320,500
May 7	745,250	115,100	485,100	154,600	45,650	110,050	110,500	94,750	643,900	2,504,900	.....
May 14	735,550	113,900	490,100	150,200	48,600	113,550	113,500	86,000	635,300	2,486,700	.....
Increase	.....	.....	5,000	.....	2,950	3,500	3,000	.....	.....	.....	.....
Decrease	9,700	1,200	.....	4,400	.....	.....	.....	8,750	8,600	18,200	.....

TEXAS

(Outside Gulf Coast)

PANHANDLE DISTRICT

	May 14	May 7
Hutchinson County	108,800	109,250
Gray County	9,200	8,250
Carson County	14,450	14,100
Wheeler County	3,000	3,250
Others	50	50
Totals	135,500	134,900

NORTH TEXAS

Burkburnett	13,000	13,000
Electra	13,650	13,850
Iowa Park-KMA	3,800	3,700
Wilbarger	13,300	14,000
Archer County	29,400	29,200
Clay County (Petrolia)	800	800
Baylor County	100	100
Montague and Cooke Cos. ..	14,350	14,190
Totals	88,400	88,850

WEST CENTRAL TEXAS

Stephens County	9,150	9,000
Eastland-Desdemona	7,250	7,250
Brown County	26,400	25,400
Coleman County	1,250	1,250
Callahan County	4,100	4,050
Shackelford County	11,950	11,750
Young County	8,950	8,300
Throckmorton County	3,100	3,000
Jack County	500	500
Palo Pinto County	2,100	1,800
Jones County	2,650	2,400
Mitchell-Scurry Cos.	3,850	3,700
Howard County	3,550	2,600
Reagan County	27,150	27,300
Crane-Upton Counties	64,650	64,500
Crockett County	1,400	1,100
Pecos County	9,600	8,800
Winkler County	700	.....
Others	2,850	2,500
Totals	191,150	185,200

EAST CENTRAL TEXAS

Mexia	11,350	11,000
Currie	600	600
Richland	900	900
Wortham	3,300	3,400
Corsicana-Powell	19,350	19,000
Nigger Creek	4,350	5,500
Totals	39,850	40,400

SOUTHWEST TEXAS

Luling	16,900	17,500
Lytton Springs	2,150	2,000
Somerset	1,200	1,200
Laredo District	14,300	14,400
Piedras Pintas	50	50
Others	600	600
Totals	35,200	35,750
T'ls Tex. (Outside Gulf Coast)	490,100	485,100

TEXAS GULF COAST

West Columbia	10,500	11,600
Damon Mound	900	900
Big Creek	500	5,400
Boling	2,150	2,100
Blue Ridge	2,250	2,800
Pierce Junction	8,750	8,850
Humble	3,550	3,600
Goose Creek	8,400	8,750
South Liberty	3,550	3,550
Hull	19,950	18,950
Saratoga	1,150	1,100
Batson	1,400	1,450
Sour Lake	4,350	4,700
Spindle Top	51,950	53,450
Orange County	5,550	5,550
Others	5,600	5,650
Totals	135,000	138,400

OKLAHOMA

North Braman	6,050	6,350
South Braman	3,400	3,500
Blackwell	3,800	3,900
Hubbard	7,300	7,650
Thomas	1,500	1,500
Tonkawa	22,800	22,950
Garber	15,750	16,150
Burbank	43,500	42,000
Osage (outside Burbank) . ..	33,850	35,100
Watchorn	2,400	2,450
Cushing	21,450	21,250
Yale Jennings	11,750	11,700
Davenport	3,450	3,500
Bristow Slick	27,250	27,250
North Okmulgee	17,100	17,250
Lyons Deaner	4,400	4,350
Stroud	1,550	1,550
Cromwell	13,000	13,150
Papoose	7,300	7,150
Wewoka	29,800	28,050
Duncan District	7,050	7,400
Earlsboro	62,400	63,500
Graham	7,550	7,700
Fox	1,800	1,800
Healdton	14,850	14,800
Seminole	286,650	291,000
Hewitt	10,100	10,000
Scholem Alechem	14,800	15,000
Others	63,150	64,500
Total	735,550	745,250

CALIFORNIA

Seal Beach	54,000	53,000
Sante Fe Springs	42,000	42,500
Long Beach	93,000	91,500
Huntington Beach	74,000	76,000
Torrance	24,000	23,000
Dominguez	17,500	17,500
Rosecrans	10,500	10,500
Inglewood	36,000	36,500
Midway-Sunset	91,000	89,000
Ventura Avenue	40,100	49,200
Others	153,200	155,200
Totals	635,300	643,900

KANSAS

Florence-Covert	1,800	1,900
Peabody-Ebling	3,750	3,850
Eldorado-Towanda	13,700	13,250
Augusta-Fox Bush	4,400	4,600
Rainbow Bend	2,500	2,400
Russell	3,200	3,200
Greenwood County	39,100	39,400
Churchill	16,650	17,150
Others	28,800	29,350
Totals	113,900	115,100

NORTH LOUISIANA

	May 14	May 7
Homer	5,250	5,100
Haynesville	7,800	7,750
Caddo Light	9,800	9,900
Caddo Heavy	4,450	3,300
DeSoto-Red River	3,850	3,750
Elm Grove	600	600
Bellevue	1,400	1,450
Cotton Valley	5,750	5,700
Urania	9,700	8,100
Totals	48,600	45,650

LOUISIANA GULF COAST

Vinton	5,350	5,250
Lockport	6,050	7,100
Evanegline	1,050	900
Edgerly	600	850
Others	2,200	2,100
Totals	15,200	16,200
Totals Gulf Coast	150,200	154,600

ARKANSAS

El Dorado	6,250	6,000
Smackover Light	11,200	11,100
Smackover Heavy	89,250	85,850
Stephens	1,350	1,350
Nevada	1,450	1,450
Lisbon	3,950	4,200
Others	100	100
Totals	113,550	110,050

MOUNTAIN STATES

WYOMING

Salt Creek	44,750	45,350
Grass Creek	2,600	2,600
Elk Basin	1,050	900
Big Muddy	2,750	2,850
Lost Soldier	3,300	3,600
Rock River	2,600	3,000
Lance Creek	700	650
Teapot Dome	350	900
Others	2,800	3,000
Totals	60,900	62,850

MONTANA

Cat Creek	2,350	2,400
Sunburst	11,500	12,500
Others	200	200
Totals	14,050	15,100

COLORADO

Moffats (Craig)	2,000	2,000
Fort Collins	3,450	3,600
Florence	650	750
Others	1,800	3,200
Totals	7,900	9,550

NEW MEXICO

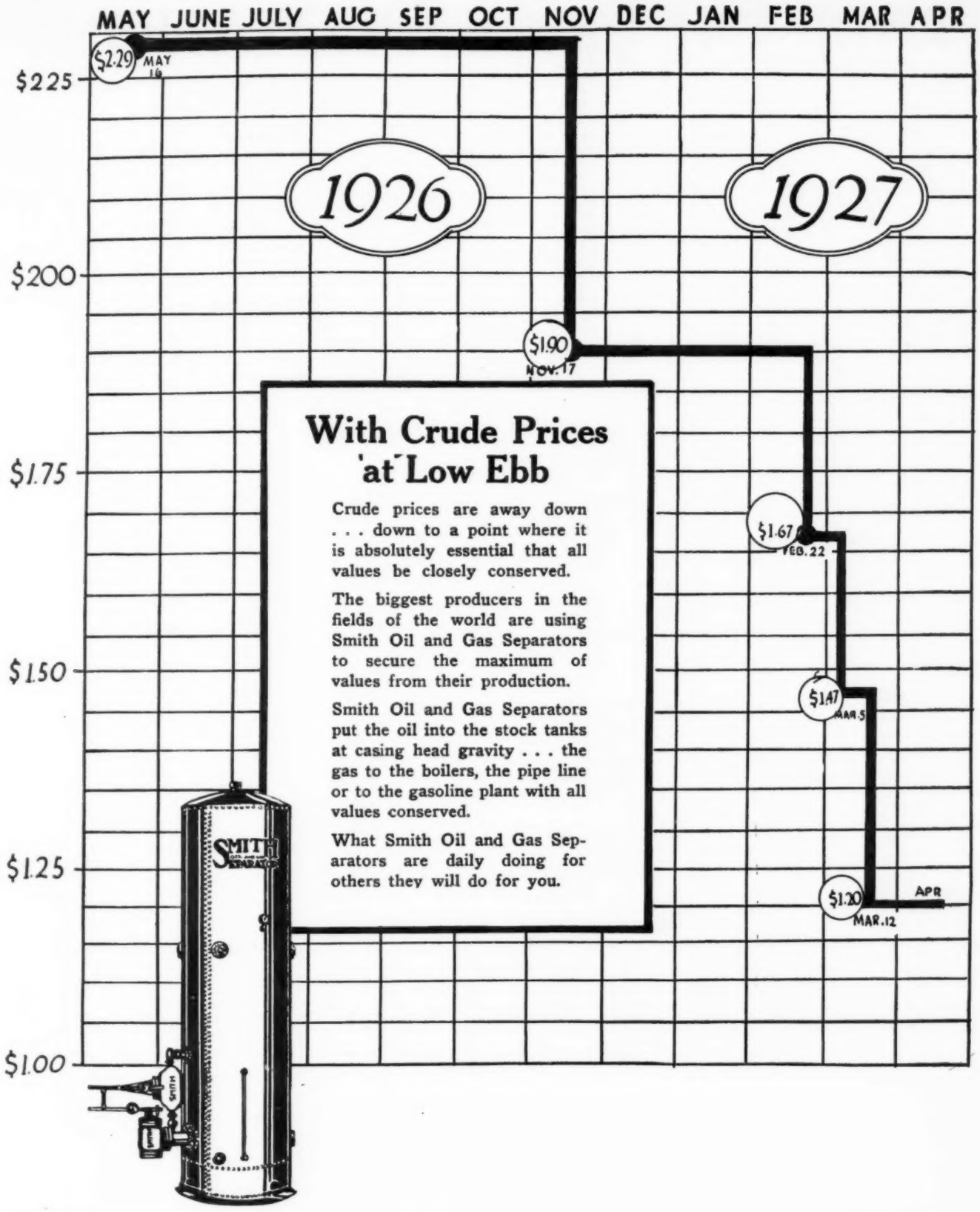
Table Mesa	300	250
Artesia	1,700	1,950
Hogback	650	750
Rattlesnake	500	4,300
Totals	3,150	7,250
Total Mountain States	86,000	94,750

EASTERN STATES

(Including Ill., Ind., Ohio, W. Va., Pa., Ky., and N. Y.)..	113,500	110,500

PRODUCTION SUMMARY

East of Rockies	1,765,400	1,766,250
United States	2,486,700	2,504,900


MAY JUNE JULY AUG SEP OCT NOV DEC JAN FEB MAR APR
$2.25
$2.00
$1.75
$1.50
$1.25
$1.00
$2.29 MAY 16
1926
1927
$1.90 NOV. 17
$1.67 FEB. 22
$1.47 MAR. 5
$1.20 MAR. 12
APR
With Crude Prices at Low Ebb
Crude prices are away down . . . down to a point where it is absolutely essential that all values be closely conserved.
The biggest producers in the fields of the world are using Smith Oil and Gas Separators to secure the maximum of values from their production.
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25 Bishopsgate
Cable Address:
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TEXAS OFFICES:
924 Post Dispatch Bldg.
Houston, Texas
1414 F. & M. Bank Bldg.,
Fort Worth, Texas.

Say you saw it in The OIL WEEKLY

CRUDE OIL PRICE QUOTATIONS

CURRENT POSTINGS

EASTERN STATES

	May 18 1927
New York Transit	$2.90
Bradford District	2.90
National Transit	2.80
Southwest	2.80
Eureka	2.75
Buckeye	2.60
Macksburg	2.80
Gaines	2.60
Somerset	1.70
Cabell	1.60
Ragland	.95
Corning, 35-cent grade	1.45
Corning, 25-cent grade	1.35
Keister	1.30

CENTRAL STATES

Illinois	1.60
Indiana	1.48
Lima	1.71
Plymouth	1.33
Princeton	1.60
Waterloo	1.18
Wooster	1.77

WESTERN KENTUCKY

Posted by Stoll Refining Company for crude from Allen, Warren, Franklin, Davies, Barren, All grades	1.50

MID-CONTINENT

Prairie, Sinclair, Gulf, Texas

Below 28 (Magnolia only)	1.10
28 to 28.9 gravity	1.12
29 to 29.9 gravity	1.14
30 to 30.9 gravity	1.16
31 to 31.9 gravity	1.18
32 to 32.9 gravity	1.20
33 to 33.9 gravity	1.22
34 to 34.9 gravity	1.24
35 to 35.9 gravity	1.26
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.30
33 to 38.9 gravity	1.32
39 to 39.9 gravity	1.34
40 to 40.9 gravity	1.36
41 to 41.9 gravity	1.38
42 to 42.9 gravity	1.40
43 to 43.9 gravity	1.42
44 to 44.9 gravity	1.44
45 to 45.9 gravity	1.46
46 to 46.9 gravity	1.48
47 to 47.9 gravity	1.50
48 to 48.9 gravity	1.52
49 to 49.9 gravity	1.54
50 to 50.9 gravity	1.56
51 to 51.9 gravity	1.58
52 and above	1.60

Magnolia Petroleum Company

	May 18 1927
Below 33	$1.05
33 to 33.9 gravity	1.07
34 to 34.9 gravity	1.09
35 to 35.9 gravity	1.11
36 to 36.9 gravity	1.13
37 to 37.9 gravity	1.15
38 to 38.9 gravity	1.17
39 to 39.9 gravity	1.19
40 to 40.9 gravity	1.21
41 to 41.9 gravity	1.23
42 to 42.9 gravity	1.25
43 to 43.9 gravity	1.27
44 to 44.9 gravity	1.29
45 to 45.9 gravity	1.31
46 to 46.9 gravity	1.33
47 to 47.9 gravity	1.35
48 to 48.9 gravity	1.37
49 to 49.9 gravity	1.39
50 to 50.9 gravity	1.41
51 to 51.9 gravity	1.43
52 and above	1.45

NORTH AND CENTRAL TEXAS

Ranger, North Texas, Mexia, Powell, Richland, Wortham, Lytton Springs, Currie Moran and Nocona Crude

Humble O. & R. Co.* and Texas Co.

	May 18 1927
28 to 28.9 gravity	1.12
29 to 29.9 gravity	1.14
30 to 30.9 gravity	1.16
31 to 31.9 gravity	1.18
32 to 32.0 gravity	1.20
33 to 33.9 gravity	1.22
34 to 34.9 gravity	1.24
35 to 35.9 gravity	1.26
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.30
38 to 38.9 gravity	1.32
39 to 39.9 gravity	1.34
40 to 40.9 gravity	1.36
41 to 41.9 gravity	1.38
42 to 42.9 gravity	1.40
43 to 43.9 gravity	1.42
44 to 44.9 gravity	1.44
45 to 45.9 gravity	1.46
46 to 46.9 gravity	1.48
47 to 47.9 gravity	1.50
48 to 48.9 gravity	1.52
49 to 49.9 gravity	1.54
50 to 50.9 gravity	1.56
51 to 51.9 gravity	1.58
52 and above	1.60

Corsicana Heavy, $1.00 per barrel, posted by Magnolia.

*Until further notice, Ranger, North Texas, Mexia, Powell, Richland, Wortham, Lytton Springs, Currie, Moran and Nocona crudes purchased at agravity lower than 28 degrees will be paid for at the posted price for 28 degrees gravity.

SOUTH TEXAS

Mirando	1.00

SOMERSET

Grayburg

Below 33 gravity	$1.05
33 to 33.9 gravity	1.07
34 to 34.9 gravity	1.09
35 to 35.9 gravity	1.11
36 to 36.9 gravity	1.13
37 to 37.9 gravity	1.15
38 and above	1.17

GULF COAST

Grade "A" all companies	1.20
Gulf Coast Light Oil, Below 25	1.15
25 to 25.9 gravity	1.17
26 to 26.9 gravity	1.19
27 to 27.9 gravity	1.21
28 to 28.9 gravity	1.23
29 to 29.9 gravity	1.25
30 to 30.9 gravity	1.27
31 to 31.9 gravity	1.29
32 to 32.9 gravity	1.31
33 to 33.9 gravity	1.33
34 to 34.9 gravity	1.35
35 to 35.9 gravity	1.37
36 to 36.9 gravity	1.39
37 to 37.9 gravity	1.41

(Continued on page 62)

CALIFORNIA CRUDE OIL PRICES AT THE WELL

Following are the current prices offered by Standard Oil Company for crude oil at the well: (Price per barrel of 42 gallons in fields indicated)

Gravity (degrees)	Signal Hill	Seal Beach	Huntington Beach	Inglewood	Olinda-Brea Canon	Athens-Rosecrans Dominguez	Torrance	Richfield	Whittier La Harbra	Montebello	Coyote Hills	Santa Fe Springs	Newhall McKittrick Kern River	Midway Sunset Elk Hills	Buena Vista Hills	Lost Hills	Coalinga	Wheeler Ridge
14-14-9	$ .85	$ .85	$ .85	$ .85	$ .85	$ ..	$ .85	$ .85	$ .85	$ .85	$ .85	$ ..	$ .75	$ .75	$ .75	$ .75	$ .75	$ .75
15-15-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
16-16-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
17-17-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
18-18-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
19-19-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
20-20-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	..	.75	.77	.77	.76	.76
21-21-9	.86	.86	.86	.86	.86	..	.86	.86	.85	.85	.86	.85	..	.79	.79	.79	.77	.77
22-22-9	.87	.87	.87	.87	.87	..	.87	.87	.85	.85	.87	.85	..	.81	.81	.81	.78	.78
23-23-9	.88	.88	.88	.88	.88	..	.88	.88	..	.85	.88	.85	..	.83	.83	.83	.79	.79
24-24-9	.89	.89	.89	.89	.89	.89	.89	.89	..	.85	.89	.85	..	.85	.85	.85	.80	.80
25-25-9	.90	.90	.90	.90	.90	.90	.90	.90	..	.86	.90	.86	..	.87	.87	.87	.81	.81
26-26-9	.92	.92	.92	.92	.92	.92	.92	.92	..	.87	.91	.87	..	.89	.89	.89	.83	.82
27-27-9	.94	.94	.94	.94	.94	.94	.94	.94	..	.88	.92	.88	..	.91	.91	.91	.85	.83
28-28-9	.96	.96	.96	.96	.96	.96	.96	.96	..	.89	.93	.89	..	.93	.93	.93	.87	..
29-29-9	.98	.98	.98	..	.98	.98	..	.98	..	.90	.94	.91	..	.96	.96	.96	.89	..
30-30-9	1.00	1.00	1.00	..	1.00	1.00	..	1.00	..	.91	.95	.93	..	.99	.99	.99	.91	..
31-31-9	1.03	1.03	1.03	..	..	1.03	..	..	..	..	..	.95	..	1.02	1.02	1.02	.93	..
32-32-9	1.06	1.06	1.06	..	..	1.06	..	..	..	..	..	.97	..	1.05	1.05	1.05	.95	..
33-33-9	..	..	..	..	..	1.09	..	..	..	..	..	.99	..	1.08	1.08	1.08	.97	..
34-34-9	..	..	..	..	..	1.12	..	..	..	..	..	1.01	..	..	..	1.11	.99	..
35-35-9	..	..	..	..	..	1.15	..	..	..	..	..	1.03	..	..	..	..	1.01	..
36-36-9	..	..	..	..	..	1.18	..	..	..	..	..	1.06	..	..	..	..	..	..
37-37-9	..	..	..	..	..	1.21	..	..	..	..	..	1.09	..	..	..	..	..	..
38-38-9	..	..	..	..	..	1.24	..	..	..	..	..	1.12	..	..	..	..	..	..
39-39-9	..	..	..	..	..	1.27	..	..	..	..	..	1.15	..	..	..	..	..	..
40-40-9	..	..	..	..	..	1.30	..	..	..	..	..	..	..	..	..	..	..	..
41-41-9	..	..	..	..	..	1.33	..	..	..	..	..	..	..	..	..	..	..	..
42-42-9	..	..	..	..	..	1.36	..	..	..	..	..	..	..	..	..	..	..	..

This SIGN will increase your gallonage

IT'S not only what this sign says that counts so much—*but what it means!*

As soon as you display this sign of the "Authorized Opaline Dealer", you sell motor oil by the commonsense method which gives motorists *correct lubrication* and maintains your PRESTIGE in SERVICE.

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SINCLAIR REFINING COMPANY, INC.

Also Makers of Sinclair Gasoline and H-C Gasoline

45 NASSAU STREET, NEW YORK

Atlanta Boston Chicago Houston Kansas City

Entire contents copyrighted 1927 by Sinclair Refining Company, Inc.

	May 18 1927
38 to 38.9 gravity	1.43
39 to 39.9 gravity	1.45
40 and above	1.47

*Humble Oil & Refining Company's postings on Gulf Coast Light stop at 35 to 35.9. Its price on all crudes above 35 is $1.37 per barrel.

Magnolia Petroleum Company's postings stop at 31 to 31.9.

MARKHAM
The Texas Company

All grades	1.00

LULING

All grades	1.00

TEXAS PANHANDLE
Magnolia Petroleum Company

Hutchinson, Carson and Gray counties, all grades	.95

Humble Oil & Refining Company, Gulf Refining Company and Kay County Gas Company

all grades	.95

Gray and Wheeler Counties
Humble Oil & Refining Company

28 to 28.9 gravity	.80
29 to 29.9 gravity	.82
30 to 30.9 gravity	.84
31 to 31.9 gravity	.86
32 to 32.9 gravity	.88
33 to 33.9 gravity	.90
34 to 34.9 gravity	.92
35 to 35.9 gravity	.94
36 to 36.9 gravity	.96
37 to 37.9 gravity	.98
38 to 38.9 gravity	1.00
39 to 39.9 gravity	1.02
40 to 40.9 gravity	1.04
41 to 41.9 gravity	1.06
42 to 42.9 gravity	1.08
43 to 43.9 gravity	1.10
44 and above	1.12

Crane-Upton-Crockett* Counties
Gulf, Humble and Kay County Gas Company

Below 26 gravity	.70
26 to 26.9 gravity	.72
27 to 27.9 gravity	.74
28 to 28.9 gravity	.76
29 to 29.9 gravity	.78
30 to 30.9 gravity	.80
31 to 31.9 gravity	.82
32 to 32.9 gravity	.84
33 to 33.9 gravity	.86
34 to 34.9 gravity	.88
35 to 35.9 gravity	.90
36 and above	.92

*Gulf does not post in Crockett County.

Magnolia Petroleum Company and Kay County Gas Company

Howard County (Chalk Field)	1.16

WYOMING-MONTANA
Wyoming

Byron	1.33
Ferris	1.60
Elk Basin	1.33
Grass Creek	1.33
Rock Creek	1.25
Lost Soldier	.95
Lance Creek	1.33
Mule Creek	1.10
Notches	.65
Big Muddy	1.25
Osage	1.33
Hamilton Dome	.85
Pilot Butte	1.75
Torchlight-Greybull	1.55
Lander	.80
Simpson Ridge	.80
Rex Lake	1.10
South Casper Creek-Poison Spider	1.00

Salt Creek
Midwest Refining Company

29 to 29.9 gravity	1.14
30 to 30.9 gravity	1.16
31 to 31.9 gravity	1.18
32 to 32.9 gravity	1.20
33 to 33.9 gravity	1.22
34 to 34.9 gravity	1.24
35 to 35.9 gravity	1.26
36 to 36.9 gravity	1.28
37 and above	1.30

MONTANA

Sunburst	1.35
Cat Creek	1.33
Lake Basin	2.20

	May 18 1927
NEW MEXICO	
Artesia	1.00
Hogback	1.38
CANADIAN CRUDE	
Oil Springs	2.18
Petrolia	2.11

*Bounty on Canadian crude is ¾ cent per gallon, or 26¼ cents per barrel.

LOUISIANA-ARKANSAS
(Standard of Louisiana, Louisiana Oil Refining Company, Gulf Refining Company of Louisiana and The Texas Co.) Homer, Haynesville, Caddo, El Dorado, De Soto and Chrichton.

Below 28 gravity	1.10
28 to 28.9 gravity	1.12
29 to 29.9 gravity	1.14
30 to 30.9 gravity	1.26
31 to 31.9 gravity	1.18
32 to 32.9 gravity	1.20
33 to 33.9 gravity	1.22
34 to 34.9 gravity	1.24
35 to 35.9 gravity	1.26
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.30
38 to 38.9 gravity	1.32
39 to 39.9 gravity	1.34
40 to 40.9 gravity	1.36
41 to 41.9 gravity	1.38
42 to 42.9 gravity	1.40
43 to 43.9 gravity	1.42
44 to 44.9 gravity	1.44
45 to 45.9 gravity	1.46
46 to 46.9 gravity	1.48
47 to 47.9 gravity	1.50
48 to 48.9 gravity	1.52
49 to 49.9 gravity	1.54
50 to 50.9 gravity	1.56

	May 18 1927
51 to 51.9 gravity	1.58
52 and above	1.60

Atlantic Oil Producing Company posts this same schedule on Homer, Haynesville, and West El Dorado.

Magnolia Petroleum Company has the same posting on Pine Island, Haynesville, Eldorado and Bull Bayou.

STEPHENS
(All Companies)

Below 28	1.00
28 to 28.9 gravity	1.02
29 to 29.9 gravity	1.04
30 to 30.9 gravity	1.06
31 to 31.9 gravity	1.08
32 and above	1.10

SMACKOVER
(Louisiana Oil Refining Company, Atlantic Oil Producing Company, and Shreveport-Eldorado Pipe Line Company)

Below 24 gravity	$1.00
24 to 27.9 gravity	1.15
28 to 28.9 gravity	1.17
29 to 29.9 gravity	1.19
30 and above	1.21

Other Companies

Below 24 gravity	1.00
24 and above	1.25
Bellevue	1.25
Jennings	1.15
Vinton	1.30
Edgerly	1.30
Starks Dome	1.30
Urania	1.00
Cotton Valley	1.00
Calion	1.00

RECEIPTS OF CALIFORNIA OIL AT ATLANTIC AND GULF COAST PORTS

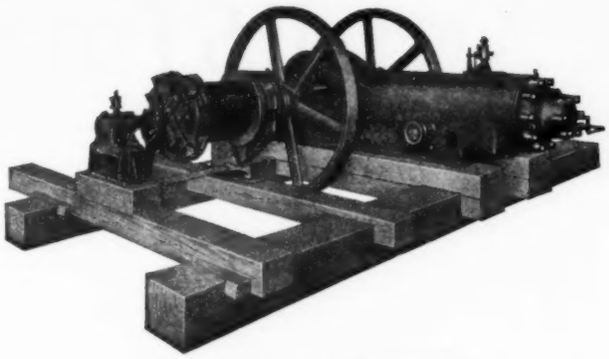
(American Petroleum Institute Figures. Barrels of 42 gallons)

	Total Month April	Total Month March	Week Ended May 7	Week Ended April 30
AT ATLANTIC COAST PORTS—				
Baltimore	380,000	515,000	98,000	80,000
Boston	131,000	170,000	.....	131,000
New York	1,430,000	1,758,000	349,000	353,000
Philadelphia	453,000	430,000	78,000	81,000
Others	399,000	416,000	.....	221,000
Total	2,793,000	3,289,000	525,000	866,000
Daily average	93,100	106,097	75,000	123,714
AT GULF COAST PORTS—				
Tampa	.....	15,000	.....	.....
Daily average	.....	484	.....	.....
Total Atlantic-Gulf Coast Ports	2,793,000	3,304,000	525,000	866,000
Daily average	93,100	106,581	75,000	123,714
DISTRIBUTION OF TOTAL CALIFORNIA OIL RECEIPTS IS AS FOLLOWS:				
Crude	608,000	644,000	90,000	296,000
Gasoline	861,000	953,000	176,000	298,000
Gas Oil	148,000	525,000	72,000	.....
Fuel Oil	1,118,000	1,182,000	187,000	272,000
Lubricating	58,000	.....	.....	.....
Total	2,793,000	3,304,000	525,000	866,000

IMPORTS OF PETROLEUM AT PRINCIPAL UNITED STATES PORTS

(American Petroleum Institute Figures. Barrels of 42 gallons)

	Total Month April	Total Month March	Week Ended May 7	Week Ended April 30
AT ATLANTIC COAST PORTS—				
Baltimore	681,000	145,000	119,000	67,000
Boston	271,000	408,000	134,000	70,000
New York	1,861,000	1,968,000	583,000	525,000
Philadelphia	182,000	286,000	.....	49,000
Others	797,000	810,000	120,000	91,000
Total	3,792,000	3,617,000	956,000	802,000
Daily average	126,400	116,677	136,571	114,571
AT GULF COAST PORTS—				
Galveston district	152,000	209,000	36,000	18,000
New Orleans and Baton Rouge	541,000	1,124,000	211,000	178,000
Port Arthur and Sabine District	.....	75,000	.....	.....
Tampa	.....	151,000	.....	.....
Total	693,000	1,559,000	247,000	196,000
Daily average	23,100	50,290	35,286	28,000
AT ALL UNITED STATES PORTS—				
Total	4,485,000	5,176,000	1,203,000	998,000
Daily average	149,500	166,967	171,857	142,571

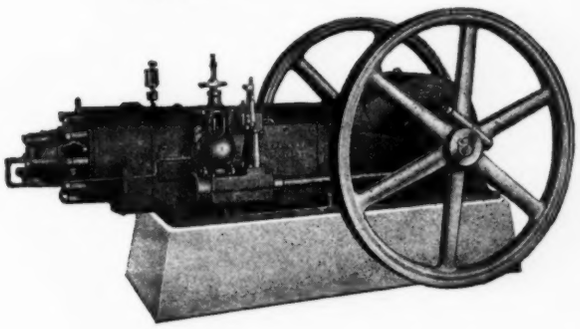


OIL DRILLING ENGINE

for Mid-Continent and Western Service $3700. Eastern Service $2600 and $3350. F. O. B. Factory.

OIL PUMPING ENGINE

In horse powers of 30, 40, 50 and 75. Can be equipped with reverse motor and one way clutch.



In Drilling or Pumping

On the Twin State's wildcatter at Stillwater, Texas, W. J. Bradley, Driller, put down 500 feet of 24-inch hole in seven days' drilling with a Franklin Valveless Oil Drilling Engine. The cost was $2.50 per day for water and the same for fuel oil—a saving of $30.00 per day over his previous experience with steam.

Show a drilling contractor a power plant that will drill more hole at a lower cost and with less trouble and he's "sold." Show him its lighter running mate that will do his swabbing and pumping at an even lower cost and he knows his troubles are solved. Try a Franklin Engine for results and economy.

Fuel costs—less than a Ford automobile. Repair bills—many Franklin Engines have drilled from 10 to 30 wells without costing one cent in repairs. Water bills cut many times. Ask a Franklin user.

FRANKLIN VALVELESS ENGINE COMPANY

Franklin, Penna.

Oil Well Supply Company

Sole Distributor

FRANKLIN

VALVELESS ENGINES

COMPLETIONS FOR PAST WEEK IN U.S. FIELDS

MOUNTAIN STATES

WYOMING

Company, Well and Location	Initial Production Bbls.	Depth
Osage—		
Producers Syndicate, 1, 25-46-64	*	....
4, 25-46-64	*	....
7, 25-46-64	*	....
Salt Creek—		
Midwest Oil Co., 33, 35-40-79	58	1225
Wyoming Associated, 13, 26-40-79	..	1115
Midwest Oil Co., 13, 35-40-79	220	1194
Wyoming Associated, 20, 26-40-79	..	1138
1, 23-40-79	111	1100

NEW MEXICO

Prairie O. & G. Co., 1, se 10-17s-31e	*	....
San Juan Leaseholds, 1, 31-30n-15w	*	....
Miley Oil Co., 1, 33-33n-12w	*	....

MONTANA

Kevin-Sunburst—		
Homestake Explo. Copr., State 26, 36-35-2w	40	1400
Red Deer Oil Co., Anderson 8, 29-35-1w	..	1534

OKLAHOMA

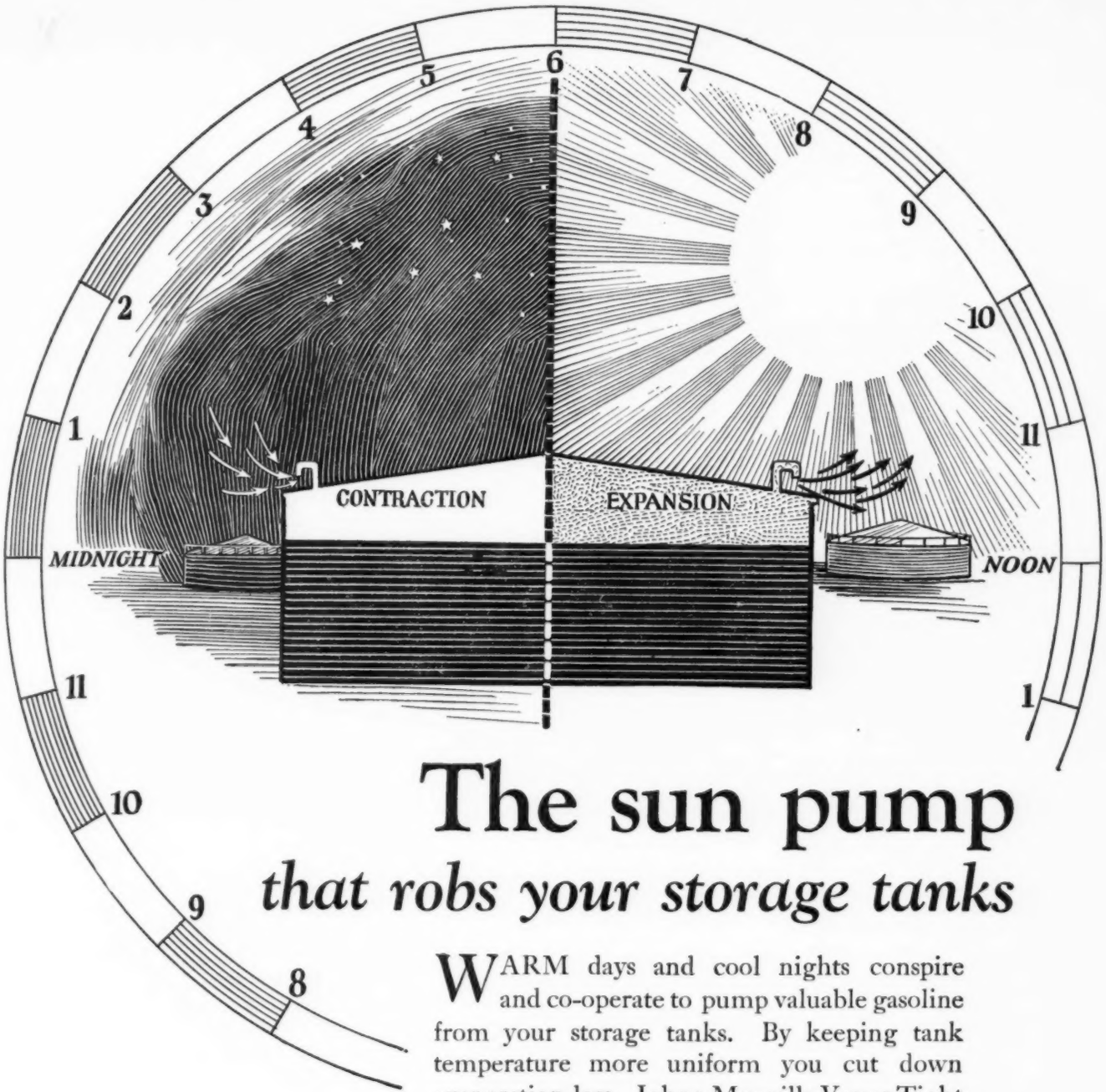
Company, Well and Location	Initial Production Bbls.	Depth
Caddo County—		
Gorton Trust Co., Wade 8, nw ne sw 2-5n-9w	10	2430
English Drlg. Co., Day 1, se 32-6n-9w	30	2412
Canadian County—		
T. B. Slick & Franks, Pazcurek 1, c s½ ne 29-13-5w	*	4542
Carter County—		
Humble, Jordan 12, ne nw sw 18-1s-3w	*	3385
Jordan 9, sw se nw 19-1s-3w	*	3347
Creek County—		
Silurian Oil, W. Starr 3, ne 17-18-7	12	2558
Riverside O. & R., Riverbed 4, ne sw nw sw 5-18-7	80	2503
Steinberger & Smith, Camard 1, sw 20-19-8	¶2	2515
Phillips, Helacoweney 1, sw se 30-15-8	¶25	3285
C. G. Tibbens, Unallotted 1, ne nw 9-14-10	250	3170
Thompson & Black, Wilson 1, nw ne sw 16-17-11	¶3	1892
A. T. Roach, Beavers 1, sw nw nw 35-18-9	20	1963
Kessler Drlg. Co., Curtis 1, ne sw 35-19-9	*	2887
Magnolia, S. M. Fugate 4, ne sw 9-20-6	*	3885
Garfield County—		
Sinclair, North Walker 73, ne nw se ne 13-22-4w	210	2857
Denker 29, c w l e½ w½ sw 13-22-4w	*	3003
Grady County—		
Carter, V. Miller 4, nw sw sw 23-3n-5w	100	1777
Carter-Kerans 3, se ne se 21-3n-5w	100	1672
Carter-Kerans 2, nw ne se 21-3n-5w	685	1695
Walford 5, sw se 16-3n-5w	135	1714
Magnolia, Woods 1, ne sw ne 17-3n-5w	¶13	2025
Smith 2, se ne 35-3n-8w	¶16	2394
J. B. Nichols, Williams 1A, ne sw sw 11-4n-8w	¶30	2425
Little Nick Oil, Farwell 3, se ne se 26-5n-8w	¶35	2366
Okla. Nat. Gas, Sanford 3, se ne sw 23-5n-8w	¶25	2297
Hughes County—		
McCulloch Oil, Carolina 1, ne nw se 17-10-9	*	4260
Kay County—		
Wentx Oil Corp., Harris G-1 c se nw 31-27-2e	¶5	616
Marland, Gaylor 1A, ne sw 19-27-1w	¶15	3511
Arkansas Fuel Oil, Moor 3, se sw sw 3-27-1w	20	3437
Comar Oil, McCormick 1w, nw se 21-29-1w	350	3358

SUMMARIZED REVIEW OF FIELD RESULTS

State—	Completions This Week	Completions Last Week	Producers This Week	Producers Last Week	Gas Wells This Week	Gas Wells Last Week	Failures This Week	Failures Last Week	Initial Production This Week	Initial Production Last Week
Arkansas	8	2	4	1	1	1	3	..	328	90
California	24	5	22	5	..	..	2	..	28,265	3,655
Colorado	..	..	..	..	..	..	..	..	....	....
Indiana	3	9	3	4	..	..	..	5	17	170
Illinois	1	11	..	3	..	2	1	6	....	125
Kansas	12	17	6	8	..	3	6	6	538	2,615
Kentucky	23	28	18	20	..	1	5	7	560	143
Louisiana	15	14	6	6	4	2	5	6	795	208
Michigan	3	11	3	7	..	..	..	4	55	145
Mississippi	..	2	..	..	..	2	..	..	....	....
Montana	2	2	1	..	..	..	1	2	40	....
New York	19	..	19	..	..	..	..	..	74	....
New Mexico	3	1	..	..	..	..	3	1	....	....
Ohio	23	32	14	18	1	6	8	8	415	431
Oklahoma	91	104	38	56	15	12	38	36	50,907	54,410
Pennsylvania	63	6	52	1	6	5	5	..	199	4
Tennessee	..	2	..	1	..	..	..	1	....	250
Texas	134	142	84	84	6	4	44	54	28,109	39,041
West Virginia	15	25	4	5	7	15	4	5	73	64
Wyoming	8	8	3	7	..	..	5	1	389	11,999
Totals	447	421	277	226	40	53	130	162	11,764	113,350
Increase this week	26	..	51	..	..	..	..	..	....	....
Decrease this week	..	..	..	..	13	..	32	..	2,586	....

Company, Well and Location	Initial Production Bbls.	Depth
Carter, Sutton 1, c sw ne 30-25-1w	*	1067
Marland, Thomas 2, se sw sw 15-15-2w	*	4046
Okla. Northern O. & G. Co., Lowery 1, ne sw 11-28-1e	*	3760
Kingfisher County—		
Max Kelly & Bu Vi Bar Pet. Corp., Kelly 1, sw se sw 16-19-5w	*	5015
Major County—		
Frantz & Slick, Gray 1, c nw 36-21-11w	*	4670
Muskogee County—		
C. M. Bradley, E. Goodrich 4, nw sw nw sw 5-14-19	50	744
W. R. Sommerville, E. Warrior 3, sw ne ne 17-15-17	50	1433
C. M. Bradley, Durant 1, c w l sw se 10-15-18	*	1897
K. Wasoff, Robbins 1, c se 34-15-16	*	1937
H. R. Middleton, Smith 5, c e l se nw 7-15-16	*	1495
E. Price, R. Morris 5, c s l sw nw 29-15-15	*	1562
Okfuskee County—		
Texas, Tiger 2, se ne se 35-11-11	¶4	2477
Okmulgee County—		
W. B. Reney, E. Love 4, c e l nw ne 16-14-14	¶2½	1653
B. Morgan, Bird 1, se ne sw	8-12-12	10 1538
Simons et al, Oence 2, se ne se ne 20-16-11	*	2858
Sinclair O. & G., Escoe 1, nw sw ne 22-16-11	*	3372
Osage County—		
Phillips 1, nw se 35-26-11	¶4¼	1686
Pantex Oil, 1, se nw sw 17-24-9	15	2290
Texas, 11, nw se ne 28-26-6	*	3040
Graham & McElroy, 1, se ne se se 5-20-10	*	411
Pawnee County—		
Sheridan Oil, 1, L. Master, nw sw se 17-20-10	*	2363
Payne County—		
Shaffer O. & R., Harris 1, se nw ne 9-18-5	¶11	2871
Pottawatomie County—		
J. E. Crosbiel Bryant 1, sw nw 9-9-5	6480	4299
Independent O. & G. & Darby Pet. Knapp 1, se ne 8-9-5	3300	4340
Amerada, Cowden 1, se sw 4-9-5	6265	4302
Phillips, Gram 1, se sw se 9-9-5	*	4299
Pontotoc County—		
Riverside Oil & Kinney, Netley 1, c s½ ne se 24-5n-5e	50	2460

Company, Well and Location	Initial Production Bbls.	Depth
Seminole County—		
I. T. I. O., Goforth 3, nw se nw 15-8-6	3445	4095
Livingston 8, sw nw nw 15-8-6	2315	4164
Bowlegs 11, sw se se 26-9-6	235	4062
Gypsy, Walker 5, sw nw se 15-8-6	4170	4258
J. Carter 3, nw 24-9-5	475	4234
Sinclair O. & G., Harjo 1, se 14-8-6	4170	4258
Mid-Continent Pet., Taylor 2, se sw se, 10-8-6	4820	3984
Independent O. & G., Cobb & Hill 4, nw se ne 7-9-8	30	3290
Shaffer O. & R., Hagler 1, nw ne ne 19-9-7	100	3607
Carter, Vierson 4, se nw sw 23-9-6	925	4337
Grisso 7, nw se sw 23-9-6	200	4154
Kingwood Oil & Roxana, Harjo 4, ne se se 22-9-6	945	4256
Barnsdall, D. Smith 1, ne nw 15-9-5	5315	4375
Magnolia, Lena 2, nw sw se 10-9-5	250	3531
Gypsy, Peters 2, se sw sw 10-9-5	5145	4372
Mid-Continent, Work 2, se nw 24-8-6	*	....
O'Kansas Oil, Williams 1, sw se se 33-7-7	*	....
Atlantic & Independent, J. Cudjo 2 ne nw se 35-9-6	*	4355
Texas, Mahuye 2, sw ne 14-9-6	*	4298
Superior, Noble 2, ne sw 10-9-6	*	3700
Roxana, Haber 1, sw ne 10-9-6	*	4315
Searight et al, Epperson 4, sw ne 33-10-5	*	4400
Epperson 2, sw se ne 33-10-6	*	4004
Stephens County—		
Magnolia, Dora Russell 9, se. ne se se 25-1s-9w	125	2185
Westheimer & Daube, Martin 1, ne se 11-1s-4w	*	....
Texas County—		
Haley, Garber & Pulse, Allison 1, c se 4-1n-12	*	4071
Wilcox, Zea 1, sw se 28-3n-13	*	4005
Tulsa County—		
O. N. West, Covery 1A, c e l nw ne 11-18-12	10	2118
Wagoner County—		
D. R. Owens, Barnett 1, c ne nw 9-18-16	¶¾	650
C. W. Gillett, Reynolds 2, se sw nw 7-16-15	*	2328
Individual Oil Corp., Bilby 1, nw se 10-18-16	*	860
Compton et al, Scott 1, ne se ne 7-17-15	*	1500
Carder et al, Fitzgerald 1, ne sw 5-18-16	*	1000
Hodges & Elliott, Dryden 1, ne se se 6-18-16	*	775



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that robs your storage tanks

WARM days and cool nights conspire and co-operate to pump valuable gasoline from your storage tanks. By keeping tank temperature more uniform you cut down evaporation loss. Johns-Manville Vapor Tight Insulated Tank Tops* keep the interior of the tanks at an even temperature. They seal the roof and eaves so that vapor cannot escape by wind drift.

Tanks equipped with Johns-Manville Vapor Tight Insulated Tank Tops* mean real economy.

*Patented, other patents pending

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FIRE PREVENTION PRODUCTS

JOHNS-MANVILLE
Oil Industry Department

Say you saw it in The OIL WEEKLY

EASTERN STATES

PENNSYLVANIA

Company, Well and Location	Initial Production Bbls.	Depth
Bradford Field—		
South Penn Oil Co., Bingham 453, tract 1	12	....
494, tract 59	3	....
416, tract 10	3	....
151, tract 34	4	....
150, tract 81	7	....
482, tract 29	7	....
154, tract 38	2	....
450, tract 90	3	....
390, tract 1	3	....
399, tract 1	3	....
Fee 109	4	....
Weston 103	4	....
Melvin 192	2	....
Bingham-Satterfield 122	3	....
U. Keating 76	2	....
Forest Oil Co., Taylor 12	3	....
13	2	....
Fisher 15	4	....
16	2	....
17	2	....
Mix Creek Oil Co., Mix Creek 24	2	....
25	3	....
26	2	....
Hamlin & Bovaird, Rew 38	2	....
39	4	....
Associated Prod. Co., Bingham 582, tract 381	10	....
North Branch Oil Co., North Branch 4	10	....
L. H. Smith & Co., Garlock 3	3	....
4	3	....
W. J. Oliver, Franchot 20	7	....
McDowell & Andrus, Bingham 296, tract 111	4	....
Kendall Ref. Co., Bishop 1	4	....
Johnson & Wright, Wright 1	4	....
A. R. Stambaugh, Rasey 2	5	....
Park Estate & Co., Park 16	*	....
E. K. Kane, Kane 46	¶½	....
C. B. Kervin, Flickinger 1	5	....
S. H. Elder & Co. Elder 22	5	....
Venango County—		
Jackson O. & G. Co., Crystal Springs 9	3	....
F. E. Kapp & Co., Kapp 5	4	....
Archie E. Fritz, Craig 2	*	....
3	1	....
Riddle & Co., Eakin 1	¶1	....
Midland Oil Corp., McNellie 32	2	....
J. L. Eakin, Kenderell 52	2	....
Blair Oil Co., Hiland 14	2	....
Walters, Smith & Co. 41	2	....
Butler County—		
Fennell & Co., McBride 2	7	....
Clendenning & Co., Clendenning 3	8	....
Garing, Lechner & Co., Lechner 1	¶1½	....
M. Garvin & Co., Raheiser 2	*	....
Smith & Co., Schroth 1	*	....
William Ruby & Co., McCullough 5	3	....
Greene County—		
Manufacturers Light & Heat Co., Crouse Heirs 1	*	3272
Philadelphia Gas Co., F. Henderson 1	¶2	3460
Carnegie Natural Gas Co., Lucinda Wright 1	5	2215
Chas. Bowers 2	¶2	3080
Center-Middle Field—		
J. Bright Estate, Irvine 1	2	....
F. J. Moser Lot 3767, tract 36	2	....
Johnson & Co., McWilliams 1	2	....
Clarion County—		
Alum Rock Gas Co., Gillingham 3	4	....
Garis Heirs 7	2	....
Cromer 3	¶1	....

NEW YORK

Company, Well and Location	Initial Production Bbls.	Depth
Allegany County—		
Empire Gas & Fuel Co., Empire 8	3	....
Empire 9	5	....
Willbart Oil Co., McDermott 1	5	....
M. J. Crowley & Co., Coast & Co. 4	5	....
N. V. V. Franchot Trus. Fries 4	7	....
Meridian & Co. 2	3	....
Fries 5	7	....
State Bank of Bolivar, State Bank 28	2	....
29	2	....
A. C. A. Oil Corp., A. C. A. Tract 1	5	....
McKean Nat. Gas Co., McKean 2	5	....
Dermitt & Gilligan, Dermitt 2	7	....
Sepany Oil Co., Multrus 2	2	....
A. J. Mooney, Mooney 1	2	....
South Penn Oil Co., Hazelwood 60	2	....
J. W. Bucher Est. Bovaird & Miller 2	3	....
C. M. Robinson, Robinson 2	3	....
Cuba National Bank, Fee 1	3	....
Martin Bros. & Co., Martin 1	3	....

WEST VIRGINIA

Company, Well and Location	Initial Production Bbls.	Depth
Marion County—		
Owens Bottle Machine Co., M. Barrackman 2	¶½	....
James Kennedy 1	¶½	1176
Carnegie Nat. Gas Co., J. L. Arnett 1385	¶½	3113
Clay County—		
South Penn Oil Co., O. D. Stockley 55	28	....
William Hively 1	15	....
Wood County—		
South Penn Oil Co., John Alleman 15	*	....
Sarah E. McPeak 11	*	....
Mingo County—		
Public Gas Corp., Henry Closterman 14	25	1505
Monongalia County—		
Maxon Oil & Gas Co., A. Whistler 4	5	3151
Wetzel County—		
Silver Hill Oil Co., L. E. Burley 4	¶¼	2565
Roane County—		
South Penn Oil Co., O. D. Stockley 56	¶¼	....
Lincoln County—		
Columbia Gas & Electric Co., L. M. Brumfield 1	¶1	2313
Ritchie County—		
Hope Natural Gas Co., W. S. Cunningham 6851	¶¼	1789
Pleasants County—		
Howard Hall & Co., Lelia M. Miracle 1	*	1976
Gilmer County—		
South Penn Oil Co., D. S. Holbert 1	*	....

KENTUCKY

Company, Well and Location	Initial Production Bbls.	Depth
Ohio County—		
D. T. Boling & Co., A. Dickens 1	15	618
Lee & Engle, J. I. Bartlett 2	16	667
Rex-Pyramid Oil Co., Scott Ambrose 5	125	662
6	125	642
Lake-Ambrose 1	*	880
Estill County—		
Brenner & Adams, Kate Sawyer 6	2	....
7	2	....
Wood Oil Co., Bud Brineger 11	2	....
Superior Oil Corp., Dan Rawlins 12	2	....
Green Campbell 11	2	....
Allen County—		
Lee Moore, Lee Moore 2, tract 8	1	351
Superior Oil Corp., Angeline McReynolds 18	5	305
M. H. & S. Oil Co., Cora Oliver 7	*	325
Warren County—		
Joe Hobson, Joe Hobson 2	*	....
Wood Oil Co., C. G. Davenport 32	10	455
Barren County—		
Norris Bros. & Davis, Loden 1	100	....
Clinton County—		
McClintock, Read & Heckathorn, Pierce Bros. 7	125	535
Cumberland County—		
Southern Prod. & Ref. Co., Huddleston 12	15	802
Johnson-Magoffin Counties—		
Hupp, Duff & Chiles, Cordia Scott 1	10	....
Dunham & Page, Joe Cole 1	*	....
Wayne County—		
W. E. Woodrow & Co., Cooper Coal Co. 6	2	....
Davy Oil Co., O. E. Gregory 5	1	....
Wolfe County—		
M. B. French, Chapman Heirs 1	*	....

SOUTHEASTERN OHIO

Company, Well and Location	Initial Production Bbls.	Depth
Washington County—		
Shay, McMullen & Co., Ora Eddy 1	4	....
Muskingum Gas Co., Clarence McMains 3	¶¼	....
McTaggart & Co., Susa M. Zinn 3	1	667
McFelley & Co., J. Silveney 1	*	....
Noble County—		
J. H. Yearian & Co., R. E. Henry 8	*	314
Way Wickens & Co., Clem Achafer 1	*	1336
Morgan County—		
Chas. Woodyard & Co., Woodyard 3	*	408
Jefferson County—		
Featner & Co., McCullough 6	*	1683

CENTRAL OHIO

Company, Well and Location	Initial Production Bbls.	Depth
Hocking County—		
Preston Oil Co., Eliza J. Price 1	135	3070
Limelight Oil & Gas Co., W. S. Lane 1	*	2895
Athens County—		
First Nat. Bank of Marietta, Pat Murphy 12	*	318
Daley & Son, Chas. H. Maxwell 1	3	1562
Holmes County—		
East Ohio Gas Co., Jacob Uhl 5	125	....
Guernsey County—		
Ohio Fuel Supply Co., J. R. Fulton 3	75	3676
Medina County—		
E. R. Edson & Son Co., W. P. Wertx 18	4	410
Licking County—		
Smith & Hazlett, Dustheimer 5	3	713

NORTHWESTERN OHIO

Company, Well and Location	Initial Production Bbls.	Depth
Seneca County—		
Onsel Bros. M. E. Steinbrook 7	25	1303
Great Northern Oil & Gas Co., John Funk 1	2	1673
Hardin County—		
Hardin County Oil & Gas Co., A. R. Zimmerman 9	30	1528
Allen County—		
James M. Jacobs, J. H. Jacobs 8	6	1330
Lucas County—		
The Ohio Oil Co., Gertrude J. Niles 48	5	1395
Shelby County—		
Wittmer Oil & Gas Properties, Matt Zimmerman 4	2	1294
Hancock County—		
George Snyder, George Snyder 2	*	1301

INDIANA

Company, Well and Location	Initial Production Bbls.	Depth
Daviess County—		
Cavinall & Co., Allison 1	5	1081
2	5	1091
Gibson County—		
Gem Oil Corp., H. E. Raiborn 3	7	1485

ILLINOIS

Company, Well and Location	Initial Production Bbls.	Depth
Marion County—		
Mt. Vernon Development Co., John Kohloff 1	*	1406

MICHIGAN

Company, Well and Location	Initial Production Bbls.	Depth
Saginaw County—		
Saginaw Prospecting Co., Scherzer 2	15	1846
Northmoor 2	20	1833
The Sun Oil Co., J. W. Weiss 3	20	1841

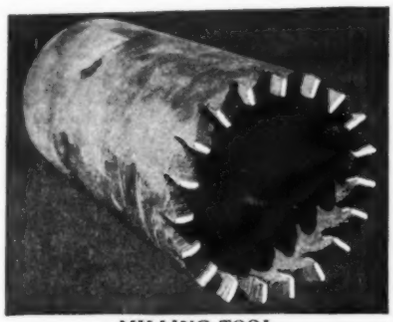
CALIFORNIA

Company, Well and Location	Initial Production Bbls.	Depth
Seal Beach-Alamitos—		
California Pet. Corp., Alamitos 2	675	4668
Alamitos 3	1520	4660
Marland Oil Co., McGrath-Selover 13	2000	4680
Petroleum Securities, Bryant 1	2400	4741
Associated Oil Co., Bryant 4, wo	2465	4650
Bryant 6	652	4435
H. J. Barneson, Tichnor	2047	4744
California Pet. Corp., Alamitos 1	1500	4773
Alamitos 4	2160	4693
Geo. F. Getty, Alamitos 2	2200	4682
Paul Getty, Cleaver 2	4025	4700
Standard Oil Co., San Gabriel 10	1322	4760
Huntington Townsite—		
Beeson & Hoye, test	40	3844
Fred H. Cole, 3	700	4425
Gene Hall, test	350	3835
Huntington-Signal Oil Co., 7	400	4385
E. J. Miley, P. E. 5	*	5928
Standard Oil Co., P. E. 6	461	4368
P. E. 5	605	4322
Huntington Beach—		
Standard Oil Co., Huntington B. 59	1536	4343
Dominguez—		
Union Oil Co., Hellman 15	250	4319
Brea-Richfield—		
Associated Oil Co., Kammerer 5	557	4406
Brea Canyon Oil Co., No. 40	400	4821

ARKANSAS

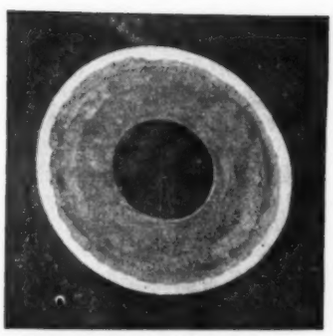
Company, Well and Location	Initial Production Bbls.	Depth
Ouachita County—		
Gulf, Bennett 11, 33-15-15	90	2363
Union County—		
Keen & Woolf, Murphy 5, 9-16-15	75	2720
Lion O. & R. Co., Flenniken A-9, 10-16-15	93	2393
Ohio, Murphy 6, 9-16-15	¶13-25	2698
Simms, Ballard 1, 9-18-13	45	2556

WHAT IS A STELLITED TOOL?



MILLING TOOL

FISH TAIL BIT



RING FOR ROTARY DISC BIT

You may have asked this question. Here is an answer.

HAYNES STELLITE is not an untried, fly-by-night metal. Stellite Cutting Tools have been standard equipment in metal working plants for years on jobs where extreme abrasion resistance is necessary.

Stellite is a cast metal and cannot be formed or shaped except by grinding.

The Stelliting process, which means flowing a thin coating of Stellite on a wearing surface, was, therefore, developed for the purpose of obtaining an easily worked tool plus the advantage of a hard wearing surface or cutting edge.

That's why oil men became interested in this metal. The performance of Stellited Bits has justified their interest, for Stellited Bits will average twice as much hole per run.

You may not know how Haynes Stellite is being used. In succeeding advertisements we shall discuss the proper methods of making Stellited Tools and their performance in actual operation.

If you haven't tried Stellited Tools, get in touch with our nearest District Office for a demonstration.

HAYNES STELLITE COMPANY

Unit of Union Carbide and Carbon Corporation

UCC

DISTRICT SALES OFFICES

CHICAGO—1949 Peoples Gas Bldg.
CLEVELAND—628 Keith Building
DETROIT—4-240 Gen'l Motors Bldg.
HOUSTON—709 Stewart Building
LOS ANGELES—1310 Santee Street
NEW YORK—30 East 42d Street
SAN FRANCISCO—114 Sansome St.
TULSA—Exchange Nat. Bank Bldg.

General Offices—Kokomo, Indiana

Stelliting with

HAYNES STELLITE

LOUISIANA

Company, Well and Location	Initial Production Bbls.	Depth
Caddo Parish—		
N. M. Handcock, Hampton 3, 15-21-15	5	1700
Standard, Stiles 180, 33-21-16	50	1834
Texas, Long 1, 15-15-12	¶1	845
Richland Parish—		
Stovall Dr. Co., Mitchell 1, 20-17-6e	¶4½	2433
Sabine Parish—		
Beckman & Freeman, Logan 1, 26-10-12	¶1-50	3272
Moffett et al, Moore 1, 5-9-12	600	3232
Union Parish—		
Ruston Dr. Co., Gulley 1, 16-20-4e	¶10	2201

SOUTH LOUISIANA

Vinton—		
Vinton Pet. Co., Rescue 6, wo	15	2450
Evangeline—		
G. W. Cline & Son, Conklin 5	30	1600
Ratcliff, Seiss & McLean, Smith 1	45	1500

TEXAS

GULF COAST

Spindle Top—		
Sun Co., Price 1	64	5200
Price 2	645	5000
Goose Creek—		
Gulf, Ashbel-Smith 27	30	2900
Lake Shore Oil Co., Duke 3	100	3450
Blue Ridge—		
W. E. Woodruff, Trustee	*	1075
Gulf, West Schenk 10	1800	3750
Navarro Oil Co., Robinson 1	2000	4200
Pierce Junction—		
Gulf, J. W. Saunders Fee 1	3000	4100
Rio Bravo, P. F. Settegast 7	1500	4300
Orange—		
Gulf, M. Granger 1, wo	1600	4450

ARCHER COUNTY

Abercrombie & Roxana Pet. Corp. Jones 1	*	1504
L. T. Burns et al, Turbeville 1-F	*	1650
Consolidated Oil Co. & Texas Co., Netherton 1	*	1604
Continental, Abercrombie-Taylor 11	30	1364
Kell & Kruger, Prideaux 7	5	744
Kruger & Staley, Turbeville 2	215	1483
Navarro Oil Co., Wilson 2	*	1500
Park Pet. Inc., Prideaux 3	20	667
Royal Pet. Co., Wilson 4	200	1540
Western Oil Corp., Prideaux 4	60	640

BROWN COUNTY

Cranfill-Reynolds, Stone 1-B	20	2263
Dallas Gas Co., Cook et al 1	*	1275
J. K. Hughes Dev. Co., Shore 10	550	1295
Shore 23	1200	1314
Humble, Fry 5	*	1332
McLester Oil Co., Wooldridge 21	30	1225
Monroe Prod. Co., Sheffield 1	*	1404
Rex-Tex & Py-Tex Oil Co., Fry 14	50	1324
Fry 15	5	1314
Richards et al, Sheffield 1	*	1400
Russell et al, Oden 2	*	813
Ryan et al, Brooks 2	*	1245
Texas Co., R. M. Lowe 26	150	1255
R. M. Lowe 36	200	1298
R. M. Lowe 42	250	1329
R. M. Lowe 45	350	1322
R. M. Lowe 48	900	1298
Wentz Oil Corp., Shore 15	425	1330
Shore 16	960	1317

BURKBURNETT

Magnolia, Bertha Ramming 3	20	1704
Hugh Reilly 133	20	1570
Proctor Oil Co., Proctor 1	2	1863

CALLAHAN COUNTY

Brannon & Murray, Bennett-Booth 1	*	1735
Lowerre et al, Hall 1	*	2150
Marland & Roeser-Pendleton, Young 1	*	2509
Murchison et al, McDermott 1	*	1803
Swoveland & Dill, Horn 1	*	1605
Thompson & Loomis, Smart 1	*	855

CARSON COUNTY

Champlin et al, Bryan 4, shot	80	3275
Nunn-McAuley Oil Co., Bryan 6	140	3200
R. R. Osborne et al, Percival 1	200	3266
Prairie & Tidal, Percival 1	150	3175
Percival 2	90	3168
Republic Prod. Co., Burnett 1	150	3215
Roxana, Garner 1	80	3192

CLAY COUNTY

Eastern Pet. Co., Bowen 1	*	1000

COLEMAN COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Evans et al, Lowe 1	*	1500
Marland & Texon, Smith 1	*	3375

CORSICANA-POWELL

Garland Kent, Hardy 15	15	1678
Hardy 17	15	1650
Magnolia, B. B. Munsey 1-B	*	3336
Hardy-Halbert 3-B	*	3312

COOKE COUNTY

Fain-McGaha Oil Corp., Vestal 1	15	1008

CRANE COUNTY

Gulf, Crier-McElroy 6	365	2830
Crier-McElroy 4-A	490	2845
Simms & Atlantic, Univ. 6-A	150	2960
Univ. 7-A	210	2968

EASTLAND COUNTY

Arnold et al, Epler 2	¶¼	3730
Cranfill-Reynolds, Collins 3-B	*	926
Belva Oil Co., Good 1	¶2½-960	3692
Gholson et al, B. L. Duffer 5	110	3494
Hoffman & Page, Webb 1	9	1294

ELECTRA

Apple-Brandeberry & Consolidated Oil Co., Ancell 1	75	1720
Mount et al, Waggoner 1	15	805

GRAY COUNTY

Gulf, J. M. Saunders 1, shot	3500	3193
Wilcox, Worley-Reynolds 24	720	2919

HOWARD COUNTY

Magnolia, Kelly-Chalk 1-A	15	1242
Mid-West Explo. Co., Clay 1	25	1791
Pure Oil Co., Chalk 2	325	1667
Tidal Oil Co., Chalk 2	40	1580

HUTCHINSON COUNTY

Anderson-Pritchard, Wm. Yake 1, shot	20	3005
McMan O. & G. Co., Cockrell 2, shot	520	3064
Phillips Pet. Co. J. T. Hodges 1, shot	60	2943
J. M. Sanford-Garland 1, shot	350	2992
Whittenburg-Elra 13, shot	1020	2765
Whittenburg-Haines 3, shot	300	2958
Whittenburg-Ruben 1, shot	150	2784
Skiatex Pet. Co., Kingsland 8, shot	250	2860
Swinney et al, Smith 1, shot twice	100	2994

K-M-A AND IOWA PARK

Harry Hines et al, River Bed 6	30	1800
John O'Neil, Chilson 1, blk 8	*	1855
Petroleum Prod. Co., Love 7-B	30	499
A. T. Wolfe et al, Cable-Daume 2	80	1820

MONTAGUE

Gulf, W. W. Jones 2-B	30	836
Seigler et al, Maddox 2	60	926

PALO PINTO COUNTY

Dixie Drilling Co., Hart 1	¶4-20	4193
Roth & Faurot, Williams 1	*	2000
T. P. Coal & Oil Co., J. N. Stuart 153	¶½	3776

SHACKELFORD COUNTY

Gwinnup et al, Goodwin-Walker 1	*	2003
Marland-Moore & Roeser-Pendleton, Colbert 1	*	2013
Prairie, Reynolds 1	†	812
Simms Oil Co., Jones 2	10	882

SOUTH VERNON DISTRICT

J. S. Cosden & Consolidated Oil Co., Waggoner 3	35	1235
Gulf, C. F. Blackman 3	75	1494
Fain-McGaha-Murchison, Fluhman 9	180	1870
Phillips Pet. Co., Waggoner 10-H	55	2604
Waggoner 21-QQ	12	2398
Waggoner 1-TT	15	2416
Waggoner 1-X	*	2745
Waggoner Ref. Co., Waggoner 8-A	*	2744

STEPHENS COUNTY

Conway Bros. et al, Gardenshire 1	¶7	2165
Lacey et al, Bradshaw 1	*	3395
Texas Fidelity Oil Corp., Pratt 9	¶¼-15	2010

THROCKMORTON COUNTY

Humble, Graham 3	*	1900
Texas Co., Graham 1	*	2466

YOUNG COUNTY

Coones & Hotchkiss, Morrison 1-A	80	3870
Halmack Oil Co., Watson 3	7	585
Lindsey Drilling Co., Graham 1	†	2685
Madden et al, Benson 1-A	*	1232
Moran et al, Stewart 5	100	780
Reed et al, Jack 4-A	45	550
Matthews 4	5	766
Riggs et al, Brown 1	10	560
Phillips Pet. Co., Whittenburg 2	†	900

KANSAS

Patton et al, Stern 1, se ne ne 33-27-6e	220	3089
Phillips, Parker 2, nw sw nw 13-27-7e	75	2663
Producers Pet., Holcomb 1, ne nw ne 7-29-4e	8	2639
Elk County—		

Company, Well and Location	Initial Production Bbls.	Depth
Butler County—		
Union Gas Corp. ,Leffingwell 10, se sw se sw 14-31-10e	200	6155
Bedel Oil, Rettig 1, sw se 29-31-10e	*	....
Clay County—		
Skow Bros., Blank 1, ne sw 21-9-4e	*	....
Greenwood County—		
Superior Oil, Jones 9, ne sw sw 21-23-13e	15	1686
Beacon Oil, Life 2, nw se sw 13-26-9e	10	2414
Jennings et al, Kipfer 1, se ne se 17-23-11e	*	2042
Patterson et al, Fletcher 1, nw se 18-23-13e	*	2198
Emerald Oil, Teichgraber 1, sw se se 3-26-9e	*	....
Conant et al, Hull 1, ne sw 4-26-9e	*	....

Natural Gas for Lower Rio Grande Valley

Houston.—Work on a 17-mile, combination 12½ and eight-inch gas pipe line from the Mirando district gas field to the Lower Rio Grande Valley has been started by the Hope Engineering Company of Mount Vernon Ohio, for the Rio Grande Valley Gas Company.

The line is to be 12½-inch on the northern end and will be cut to eight-inch in the lower part of the distributing territory, according to plans. It will serve practically all of the towns in the valley with both domestic and commercial fuel, and several of the places have already taken contracts for the gas. Brownsville is the southernmost city to be served under present plans, and will be the destination of the 171-mile line.

Gas fields, which will furnish gas for the line, include the Zapata, Jim Hogg and Webb County pools. The new line will be a high pressure system.

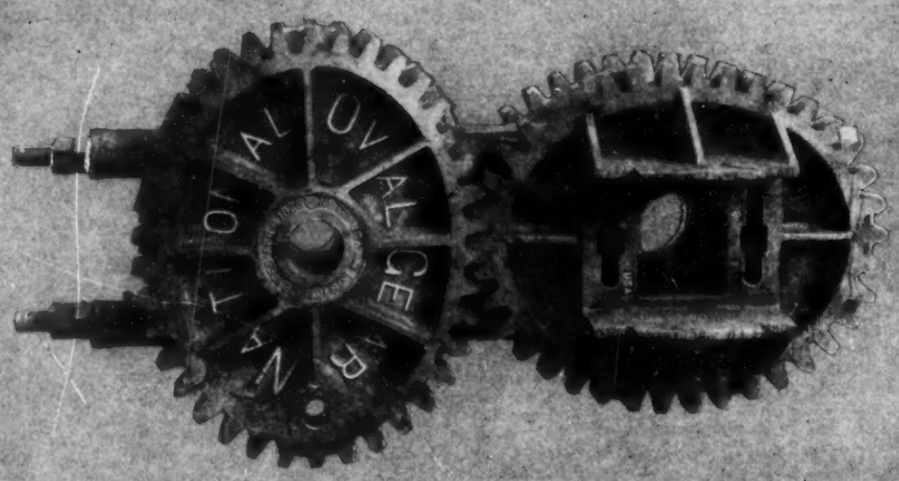
A sale of 52,000 acres of leases with 25 producing gassers for a consideration of $600,000 in cash and royalties to William F. Morgan is reported. Morgan, a veteran operator in the Mirando district, becomes one of the leading producers of gas in the district under this purchase, and, from reports in Laredo last week, will supply under contract much of the gas for the new line.

Estimates of the productivity of the entire Mirando district have been placed at a potential recovery of 300-000,000 cubic feet of gas daily for a period of more than 10 years.

Abandon After Three Years

Hawthorne, Calif. — Winwell Oil Company's Dome 1 is being abandaned at 5570 feet, after having drilled for the past three years. The well has had a number of good showings, but water and mechanical troubles have held up progress to such an extent that it was decided to abandon.

NATIONAL OVAL GEAR PUMPING ATTACHMENT



THE NATIONAL SUPPLY COMPANIES

WILDCATS FROM ALL SECTIONS

MOUNTAIN STATES

WYOMING

Margelexom Oil Co.'s Smith 1, 11-38-78w, rebldg rig destroyed by fire. Oil Mountain Synd.'s Alkali Butte 1, 17-33-94, sd 700 ft. Fairway Oil Co.'s Crazy Woman 1, 7-47-87, dr 1400 ft. Criterion Oil Co.'s Irvine 1, 5-31-70, dr 3200 ft. Carter Oil Co.'s Nowood 1, 17-48-90, dr 1836 ft; Billy Creek 2, 17-48-82, fsh tubing 4398 ft. Producers and Refiners' Wyana 1, 25-26-88, dr 2735 ft; Murphy Dome 1, 8-43-91, dr 3012 ft; Garland 1, 24-56-89, fsh tools 2640 ft; Muskrat 1, 34-34-92, rig; Tensleep 1, 13-46-89, rigging. Union Oil Co. of California's Taylor 1, nw 22-47-101, dr 950 ft; Burnham 1-A, 28-43-91, sd 2700 ft; State 1, 34-43-91, sd 4400 ft. Roy C. Tarrant et al's Sheep Mountain 1, rig. Tarrant Synd.'s Steele Creek 2, 17-46-82, sd 3392 ft. Graybeal Oil Synd.'s Graybeal 1, 16-28-90, dr 3200 ft. Foreman Oil Co.'s Rawhide 1, 24-26-62, sd 5505 ft. Wellington Oil Co.'s Bear Creek 1, dr 2600 ft. Iowa-Wyoming Inv. Co.'s Megowan 1, ne 30-1-2, sd 3300 ft. Lake Valley Oil Co.'s Eight Mile Lake 1, se 14-20-88, sd 4800 ft. Platte River Drilling Assn.'s Gurnsey 2, nw 12-26-67, collapsed cas 2310 ft. Oil Wells Synd.'s Poison Lake 1, ne 17-31-71, rig. Buck Creek Oil Co.'s Ant Hills 1, ne 25-37-63, rig.

COLORADO

Ohio Oil Co.'s Red Mesa 1, 11-33-12, dr 3810 ft; Vermillion Creek, 22-12n-11w, rig. Phillips Pet. Co.'s Niles 1, 27-16-65, dr 425 ft. Northeastern Colorado Oil Co.'s Williard 1, 36-8-55, dr 3190 ft. Boulder Oil Co.'s Eberhart 1, shot 3400 ft. Ben B. Bowen's Archleta 1, 17-34-2, dr 615 ft. Warren Miller Synd.'s Ute 1, spd. E. B. Klem's Ferguson 1, 12-34-7, dr 995 ft. Pacific Coast Gasoline Corporation's Cortese, 3-34-62, sd 500 ft; Cortese 2, 3-34-62, sd 505 ft. No Jack Oil Co.'s Chacuaco, 34-32-65, sd 1230 ft. Mountain States Gasoline Co.'s Sandoval 1, 4-34-62, gas 810 ft. Foley & Geldsworthy's Government 1, 11-30-60, dr 1370 ft. Left Hand Oil Co.'s Prechtl 1, 34-3n-70, derrick collapsed 1820 ft. Timpas Dome Syndicate's Belle 1, 29-26-57, crooked hole 650 ft. Repollo Oil Vo.'s Deines, 33-1n-70, fsh cas 4075 ft. Frank E. Kistler & Co.'s Gillespie 1, 28-2n-69, dr 4000 ft. Taylor Oil Co.'s Taylor 3, 34-19-69, spudding 210 ft; Taylor 4, 34-19-69, spudding 200 ft. Midwest's Rangely 2, 30-2-102, st reaming 3020 ft. Texas Production Co.'s Emerald 2, 31-2-102, dr 3225 ft; Wilson Creek 1, 27-3-94, dr 3430 ft. Red Creek Oil Co.'s El Paso 1, 19-17-67, dr 300 ft. General Petroleum Co.'s Montrose 1, 33-1-70, re-dr 4735 ft. Boulder Drilling Co.'s Boulder 1, 9-1-70, dr 2425 ft. Essok Oil Co.'s Boulder 1, 5-1-70, dr 3055 ft. Eureka Oil Co.'s Mesa 1, sw 24-1-1, dr 1600 ft. Uncle Joe Oil Co.'s Fremont 1, 6-47-19, dr 3200 ft.

NEW MEXICO

Wooley & Jones' McIntyre, se 21-17-30, rebuilding burned dk. Superior Oil Co.'s Eddy 1, 33-28-28, spudding 200 ft. Pittsburgh Dev. Co.'s Cathedral Rocks 1, 30-20-10, dr 3250 ft. Childers Dr. Co.'s McKinley County 2, 19-18-10, dr 200 ft. Acme Oil Co.'s Land Co. 1, 26-6-3, dr 1700 ft. Sun State Pet. Co.'s Paso Monte 1, 14-24-30, dr 3000 ft. San Juan Oil & Gas Co.'s Minerman 1, 32-7-10, resume dr 2328 ft; Randall 2, 20-6-10, dr 2500 ft. F. C. Wilson, Trustee's Place 1, 12-6-7, dr 900 ft. R. M. Smith's James 2, 23-29-11, spudding. Hasson Pet. Co.'s Curry County 1, 22-8-36, rig. Weathers Syndicate's Curry 1, 7-25-24, dr 800 ft.

UTAH

Snowden & McSweeny's Prommel 1, 5-27-21, dr 2000 ft. Utah Southern's Shafer 1, 17-27-20, sd 5778 ft; Cedar Mesa 1, 28-40-18, dr 2500 ft; Canyon 1, 6-30-21, dr 3000 ft. Union of California's Lisbon 1, 16-30-25, dr 600 ft. Texas Production Co.'s Wayne County 1, ne 5-27s-14e, rig. Utah Pet.'s Gibson 1, 1-30-20, dr 1900 ft. Embar Oil Co.'s Moab 1, dr 3550 ft. Francis Oil-Utah Pete's Hulkito 1, 36-41-17, cmt 1640 ft.

ARKANSAS

Completions

Nevada County—
Fruen et al, Rhodes 1, 22-12-21 .... * 2344

Ouachita County—
Humble, Lancaster 1, 15-14-19 ..... * 1400

Union County—
Marine Oil Co., Thompson A-2, 10-18-13, ... * 3003

Ashley County—Rhodes et al's Bledsoe 1, 20-15-7, sd 2554 ft.

Bradley County—Johnson & Adams' Southern Lbr. Co. 1, 12-12-12, dr 2205 ft.

Columbia County—Atlantic's Couch 1, 23-17-20, dk. Columbia Synd.'s Whitehead 1, 14-19-23, sd 2350 ft. Colquitt & Thomas' Duffer 1, 23-18-19, dr 1300 ft. Haynes et al's Runyon 1, 3-16-21, dr 500 ft. Mitchell et al's Franks 1, 25-19-22, sd 150 ft. Mitchell & Isles Bodcaw 2, 4-20-21, dr 2050 ft. Mair et al's Gantt 1, 15-17-22, dk. Scott Phillips Davis L. & I. Co. 2, 6-18-20, sd 2145 ft. Wingfield et al's Bodcaw 1, 4-20-21, sd 2025 ft.

Clark County—Whelen Oil Co.'s Barrow 1, 35-10-20, dr 2165 ft.

Drew County—McClintock et al's Ogle 1, 35-3-5, sd 2550 ft.

Grant County—Jones et al's Meek 1, 5-4-11, sd 400 ft. Shaffer Oil Co.'s Long Bell 1, 36-5-12, dr 2940 ft.

Garland County—Chaywood Oil Co.'s Malvern Lbr. Co. 1, 17-2-17, dr 500 ft.

Hempstead County—Arkansas Natural Gas Co.'s Goodlet 1, 34-10-26, set 10-in, 123 ft. Burton et al's Garland 1, 23-10-25, sd 2210 ft.

La Fayette County—Ken-Saw Pet. Co.'s Red River Lbr. Co. 2, 5-20-25, sd 2840 ft.

Lincoln County—Pine Prairie O & G Co.'s Carter 1, 33-10-6, dr 510 ft.

Little River County—Greeson et al's Waldrip 1, 4-13-31, sd 1740 ft. Grote et al's Allen 1, 2-13-31, sd 2941 ft. Johnson et al's Hawkins 1, 10-11-31, sd 1594 ft.

Miller County—Lenz et al's Dale 2, 28-15-26, r 2765 ft. W. D. Nash's Priest 1, 26-14-27, sd 3850 ft.

Nevada County—Holmes et al's Wallace 1, 11-14-21, sd 1200 ft. Humble's Bodcaw 4, 9-15-22, dr 3804 ft. Ozan Oil Co.'s Ellis 6, 2-14-21, set 10-in at 41 ft.

Ouachita County—F. A. Book Tr's Johnette 3, 33-15-16, arr to deepen 1980 ft. Copenhagen et al's Berg 3, 13-15-17, set 6-in at 2183 ft. J. E. Crosby's Berry 12, 33-15-15, plugging back from 4570 ft. Exchange Oil Co.'s Umsted 3, 4-16-15, set 10-in at 105 ft; Berg 6, 4-16-15, set 10-in at 108 ft. A. T. Grayson's Reynolds 1, 21-14-17, set 6-in at 1744. Imperial O. & G. Co.'s McClannahan 9, 6-16-15, dr 2713 ft. Middlesex Oil Corpn.'s Shirley 5, 26-15-17, dr 2240 ft. Magnolia's Morgan 1, 7-15-19, rig. Marine Oil Co.'s Umsted 7, 5-16-15, wosr 2289 ft; Umsted 11, 5-16-15, wosr 2362 ft. J. D. Reynold's Chandler 1, 3-14-17, dr 1900 ft. Sutton's Schoolhouse 2, 28-15-16, sd 3060 ft. Unity Pet. Co.'s Umsted A-8, 33-15-15, recemented casing 2388 ft.

Union County—C. H. Allison's Howard 1, 8-19-15, sd 15 ft. Brown et al's Slaughter 1, 2-17-16, dr 2230 ft. Bondurant et al's Garner 1, 8-18-22, r 2635 ft. Cresent Oil Co.'s Saxon 1, 5-16-16, sd 53 ft. Garrett & Modisette's Union Saw Mill 1, 7-18-13, tested sw 3817 ft. W. H. Gilliland's Hodges B-1, 1-16-17 tested sw 2564 ft. Gulf's Murphy 23, 9-16-15, wosr 2710 ft. Humble's Flenniken B-2, 9-16-15, wosr 2766 ft; Pate 10, 10-16-15, set 6⅝-in at 2379 ft. Imperial O & G. Co.'s Murphy 5, 9-16-15, sd 2565 ft; Goodwin 1, 22-17-16, sd 3118 ft. E. M. Jones' Murphy 4, 17-16-15, dr 2800 ft. Keene & Woolfe's Murphy 6, 9-16-15, dk. Lion O & R Co.'s Lawton A-11, 10-16-15, wosr 2393 ft; Murphy H-2, 9-16-15, wosr 2316 ft; Murphy Land Co. 1, 23-18-18, set 12½-in at 206 ft. Lyall et al's Stegall 1, 11-17-14, set 12½-in at 47 ft. Magnolia's Crawford 2, 8-16-16 wosr 2624 ft; Crawford 3, 8-16-16, dk; Freeman 3, 7-16-16, wosr 2692 ft; Laney 3, 8-16-16 dk; Laney 4, 8-16-16, dk; Murphy 3, 8-16-15, dk; Murphy 9, 8-16-15, tested sw 2662 ft; Wilson 6, 17-16-15, tested dry 2662 ft; Wilson 7, 17-16-15, dk; Union Lbr. Co. 1, 21-16-16, dr 2200 ft. Marine Oil Co.'s Winn Estate B-1, 10-18-13, dr 2650 ft; J. L. Meeks Milner 2, 15-17-16 rig. Mounts et al's Pratt 6, 8-18-15, dr 1456 ft. National Cons. Pet. Co.'s W. A. Fagg 1, 8-16-16, set 10-in at 40 ft; Fagg 2, 8-16-16, wosr 2647 ft. Natural G & F Corpn's Bilyew 4, 9-16-15, drilling out cement 2312 ft; Bilyew A-1 (formerly No. 8) set 6⅝-in at 2294 ft; Murphy F-5, 9-16-15, set 10-in at 250 ft. J. J. O'Brien's Saxon 1, 16-16-16, wosr 2170 ft. Ohio's Crane 1, 1-17-14, plugging off 2842 ft; Murphy 5, 9-16-15, dr 2585 ft. Peer Oil Co.' Palmer B-1, 9-16-15, coring 2805 ft. S. Richardson et al's Lawton 5, 10-16-15, 2691 ft. Rice et al's Newton 1, 13-17-16, set 10-in at 102 ft. Simm's Crawford 1, 4-18-13, sd 2705 ft. Stewart et al's Murphy 5, 9-16-15, dr 2700 ft. Sunny Jim Oil Co.'s Flenniken 4, 9-16-15, dr 2600 ft. Sun's Hays 3, 3-16-15, arr to perforate cas at 2293 ft; Thompson 1, 10-18-13, coring 2531 ft. Unity Pet. Co.'s Roper 15, 3-16-15, dk. L. M. Vaughn Trustees' Ezell 1, 12-17-15, dr 1710 ft.

LOUISIANA

Completions

Caddo Parish—
Burford et al, Dambley 1, 2-20-16 .. * 2276

Claiborn Parish—
Triangle Drlg Co., Byrd 1, 17-19-5 .. * 2813

La Salle Parish—
Tunica Pet. Co., L. & A. 25, 8-8-3e * 2210

Sabine Parish—
Magnolia, La. L. L. L. Co. 1, 11-6-11 * 3298

Winn Parish—
Humble, L. & A. 21, 29-10-2w ..... * 1460

Bienville Parish—S. F. Borden's L. & A. 2, 9-15-7, tested dry 2800 ft. Kimbrough et al's Cargyle 1, 27-15-18, sd 1550 ft.

Bossier Parish—Doern et al's Thomas 1, 9-22-11, sd 2765 ft. Glassell et al's Gibson-Tiguer 1, 14-21-14, dr 1313 ft. Humble's B. & W. 30, 15-19-11, set 10-in at 1978 ft. Magnolia's Dodson 1, 15-23-12, dr 3082 ft. Palmer Corpn.'s Bossier L. & L. Co. 4, 9-16-11, dr 3716 ft. Ramsey et al's Dodson Est. 1, 16-23-12, dr 2200 ft; Robertson 1, 22-23-12, set 8¼-in at 3087 ft. Sligo Synd.'s Jeter 1, 23-17-12, set 12½-in at 1154 ft. Simms Oil Co.'s Sandidge 2, 5-18-11, sd 2235 ft. C. O. Tate Trustees' Dodson 1, 15-23-12, dr 240 ft. Texas Co.'s Caplis 14, 24-16-12, wosr 1551 ft. Tubbs et al's Jacobs 1, 26-20-13, dr 2560 ft.

Caddo Parish—Askew et al's Elliott 1, 12-19-16, set 10-in at 120 ft. Arkansas F. O. Co.'s Gayle 8, 30-16-12, dr 75 ft. Bahan et al's Wilburn 1, 4-17-16, rig; Wilburn 2, 4-17-16, blg 2545 ft. Bethany O & G Co.'s Offenhauser 1, 1-20-16, sd 2225 ft. Berston's Murff 6, 12-21-16 wosr 1080 ft. Bussa & McGoldrick's Becham 6, 28-21-15, wosr 1650 ft. W. D. Chew's Fee 5, 33-21-16, wosr 1847 ft; Fee 6, 33-21-16, set 10-in at 62 ft. Dixie's Robertshaw 81, 13-21-15, arr to shoot 3775 ft; Robertshaw 87, 14-21-15, set 6-in at 1490 ft; Slattery 10, 27-21-15, r 3875 ft; Noel A-2, 13-21-15, set 6-in at 3720 ft; Fitzsimmons 8, 14-21-15, set 10-in at 160 ft. Double I Oil Co.'s Spell 10, 15-21-15, rig. Empire's Levee Board B-1, 36-21-16, sd 20 ft. J. B. Files Payne 1, 32-23-16, sd 925 ft. Falcon Drlg. Co.'s Schmidt 1, 27-20-15, dk. Gilliam Synd's Sellington 1, 27-21-14, sd 2732 ft; Taylor 1, 17-21-14, blg 914 ft. Gulf's Ferry Lake 268, 22-20-16, set 6⅝-in at 2144 ft; Tyson 13, 14-21-15, dr 2420 ft; Wemple 5, 14-20-15, dr 760 ft. B. A. Hardy Tr's Thigpen & Herold 2, 26-18-16, set 10-in at 100 ft. Haynes Bros.' Murray 1, 14-21-15, dr 2750 ft. Magnolia's Caddo L. B. 2, 8-20-15, sd 2190 ft; Dillon 16, 24-21-15, perforating casing at 1200 ft; Dillon 18, 24-21-15, dk; Planters 4, 7-21-14, dr 2406 ft; Robert Shaw 20, 23-21-15, dr 3602 ft. Marshall Natural Gas Co.'s Sharp 1, 22-18-16, set 12½ in at 170 ft. H. I. Morgan's Glassell 1, 10-20-15, set 6-in at 2140 ft. Ohio's Moodie Fortner 1, 5-22-15, dr 2992 ft; Smith 25, 12-21-15, set 12½-in at 244 ft. Owl Oil Co.'s Bell 1, 5-17-16, dr 1480 ft; Wilburn 3, 4-17-16, loc. Shreveport Oil Corpn.'s State 1, 28-21-16, dk; State 2, 27-21-15, sd 1250 ft. Simplex Oil Co.'s Schmidt

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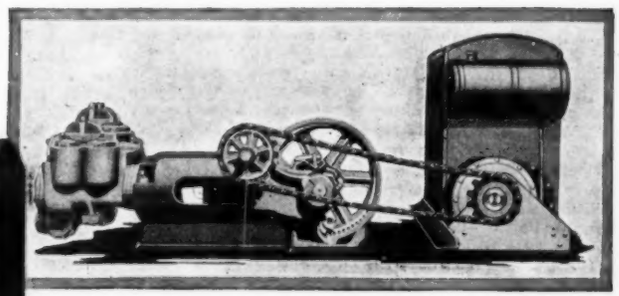

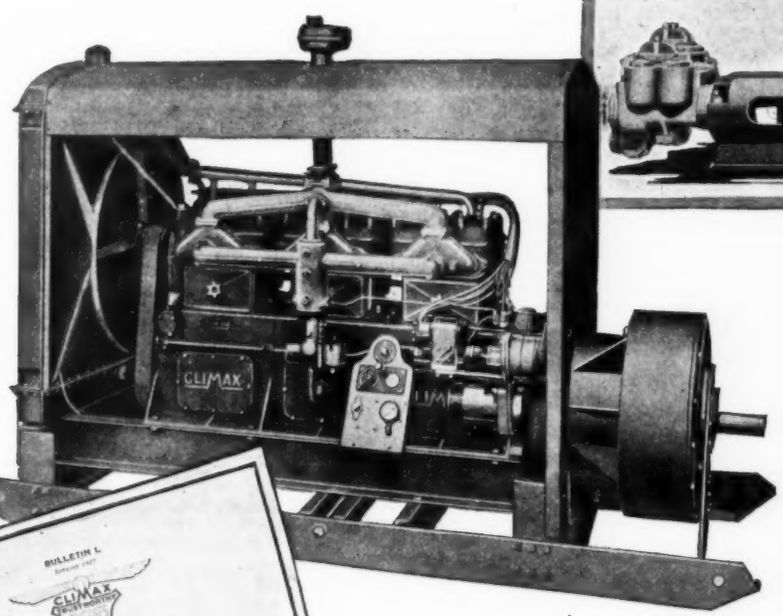

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2, 15-20-15, rig. Standard's Stiles 183, 33-21-16, wosr 1836 ft; Stiles 184, 33-21-16, set 10-in at 50 ft. Standish Oil Co.'s Allen 11, 23-22-15, wosr 1055 ft. Texas Co.'s C. M. L. 47, 23-21-15, r 3675 ft; Curtis 7, 14-20-15, set 10-in at 59 ft; Herndon 6, 22-21-15, dk; Hicks & Payne 5, 21-21-15, sd 3143 ft; Noel B-13, 14-21-15, set 12¼-in at 1235 ft. Tholl Oil Co.'s Muslow 3, 31,21,15, wosr 1670 ft. Tubbs et al's Hines 1, 9-14-16, rig.

Caldwell Parish—Southern C O Purch. Co.'s Caldwell L. & T. Co.'s 5-13-5e, sd 147 ft.

Catahoula Parish—S. D. Hunter Tensas Delta 2, 21-9n-7e, rig. Lochnager O. & G. Co.'s Beasley 1, 26-9n-6e, sd 3093 ft.

Claiborne Parish—Magnolia's Lee 1, 16-22-8, dr 3363 ft. Mitchell et al's Wilburn 1, 23-17-7, dr 2530 ft.

De Soto Parish—Craige et al's Riggs 1, 27-15-13, sd 3315 ft. Dixie's Jenkins 1, 9-12-11, fsh 5283 ft. Helm & Jarman's Joyner 1, 28-12-11, sd 3018 ft. Hoosier Oil Co.'s Lanier 1, 5-11-11, dr 50 ft. Magnolia's Logan 1, 17-10-12, dr 2000 ft. Reliance Drlg. Co.'s Jones 1, 8-11-14, set 10-in at 68 ft. W. M. Sebastin Synd.'s Sebastin 1, 11-10-13, set 6⅝-in at 2904 ft. Seip et al's Robertson 1, 18-10-12, sd 300 ft. Texas Co.'s Wemple A-12 2-12-12, set 6-in at 2433 ft; Sample C-15, 36-13-12, set 12½-in at 39 ft.

Franklin Parish—Barbour Oil Co.'s Baker 1, 3-15-7e, sd 2595 ft. Harrell & Hall's Duncan 1, 20-13-7e, sd 2084 ft.

Grant Parish—Phillips et al's Barrett 1, 17-9-1e, dr 1605 ft. Rue et al's Elias & Williams 1, 10-7-4w, sd 1913 ft. M. B. Swope's Fee 1, 18-9-1e, dr 1630 ft.

Jackson Parish—Grigsby et al's Adams 1, 22-17-4w, sd 2900 ft. Houseman et al's Norton 1, 34-15-3w, sd 400 ft. Ferguson Trust's Martin 1, 3-15-1e, flowing sw 3475 ft. Louisiana Pet. Co.'s Davis Lbr. Co. 3, 22-16-1w, sd 2301 ft.

La Salle Parish—A. E. Hudson's Urania 3, 7-10-2e, set 10-in at 100 ft. Louisiana Oil Ref. Corpn.'s Tremont B-37, 25-10-1, wosr 1550 ft; Tremont B-1, 30-10-2e, rig. Tunica Pet. Co.'s L. &. A. 26, testing 770 ft; L. & A. 27, 9-7-2e, set 10-in at 60 ft; Whateyml, 9-7-2e, set 10-in at 102 ft. Yeary et al's Urania 5, 8-10-2e, sd 1552 ft. Wingfield et al's Gibson 1, 2-9-1e, sd 1470 ft; Gibson 2, 2-9-1e, dk.

Morehouse Parish—Consolidated Carbon Co.'s White 1, 16-20-4e, sd 1277 ft. Falcon Drlg. Co.'s Gladney 1, 5-21-7e, dk. Natural Gas Prod. Co.'s Handy 1, 18-20-5e, set 6-in at 2148 ft; Crossett 20, 21-23-7e, dk. United Carbon Co.'s Townsend 1, 29-21-5e, sd 2112 ft; Atkins 1, 26-20-5e, dk.

Natchitoches Parish—Lawson et al's Clark & Moore Lbr. Co. 1, 23-5-6w, dr 2760 ft. Ohio's Thomas 1, 23-13-6w, dr 2068 ft. E. C. Reidheimer Blewer 1, 10-11-8, set 10-in at 62 ft. Tunica Pet. Co.'s L. & A. 24, 35-13-6w, dr 3170 ft.

Ouachita Parish—Consumer's Gas Co.'s Williams 1, 10-19-5e, set 12-in at 202 ft. Louisiana Dev. Co.'s Fee 39, 1-19-4e, sd 2056 ft; Fee 40, 29-20-5e, loc; Fee 41, 31-20-5e, loc. Ouachita Natural Gas Co.'s D'Arbonne 2, 25-19-2e, sd 2780 ft. Peerless Co.'s Moore 3, 29-20-4e, loc. Palmer Corpn.'s Millsap 4, 36-20-4e, set 12½-in at 198 ft.

Rapides Parish—Minnesota Oil Corpn.'s Wattermack 1, 7-5-3w, coring 2091 ft. George Sebastier's Ritchie 1, 38-5-4, trying to mud off gravel bed 300 ft.

Red River Parish—Alden Oil Co.'s Powell 1, 13-11-10, sd 2301 ft. Gulf's Kennedy 23, 24-13-11, dr 2577 ft. Phillips Pet. Co.'s Long Bell 1, 16-12-8, coring 3205 ft.

Richland Parish—Gulf's Rhymes 2, 5-16-6e, dr 2780 ft; Wayne L. & T. Co. 1, 36-17-5e, sd 3052 ft; Seibert 2, 11-16-5e, sd 2303 ft. S. D. Hunter's Seibert 1, 1-16-5e, sd 2358 ft. Helm et al's Thomas 1, 10-14-5e, dk. Louisiana Pet. Co.'s Binion 1, 22-17-6e, sd 2474 ft. Oliver et al's Hatch 1, 2-15-5e, trying to set casing at 2316 ft. Ruston Drlg. Co.'s Earl 1, 5-16-6e, sd 1238 ft. Standard Drlg. Co.'s Delta H. L. Co. 1, 22-16-7e, sd 200 ft. Tex-La Carbon Co.'s Broughton 1, 1-15-6e, sd 2602 ft.

Sabine Parish—Arkansas Fuel Oil Co.'s Logan 2, 28-10-22, set 10 in. at 205 ft; Horn 1, 33-10-12, dk; Logan 6, 33-10-12, rig; Logan 7, 33-10-12, set 10-in at 203 ft; Logan 8, 33-10-12, rig; Logan 9, 33-10-12, rig; Moore 1, 32-10-12, rig; Rembert 1, 5-9-12, dr 25 ft; Williams 1, 33-10-12, rig. Emlett et al's Bowman Hicks 5, 8-7-12, fsh 4070 ft; Bowman Hicks 7, 11-7-14, fsh 2623 ft; Sabine Lbr. Co. 1, 8-7-13, dk. Lewis Clark Pet. Co.'s Wyatt 1, 23-5-12, dr 3850 ft. Louisiana Oil Ref. Corpn.'s Logan 1, 28-10-12, set 10-in at 205 ft. Magnolia's Hall 1, 33-10-12, sd 1750 ft; La. L. L. L. Co. 2, 2-6-11, lcn. C. W. Robinson's Hamlin 1, 6-9-13, dk. Woodley Pet. Co.'s Robinson 1, 33-10-12, dr 2840 ft.

Union Parish—Camette et al's Tugwell 1, 22-22-1e, sd 1525 ft. Clark Creek Pet. Co.'s Frost Johnson 2, 9-23-1e, sd 2307 ft. Interstate Natl. Gas Co.'s Parks 1, 23-20-3e, dk.

Webster Parish—Davis et al's Lee 1, 22-22-9, sd 2834 ft. S. A. Lanes' Roberts 1, 20-19-10, dr 1500 ft. Louisiana Oil Ref. Corpn.'s Gray 1, 28-21-10, rig. Magnolia's Cox 3, 23-21-10, dr 2040 ft; Marshall 1, 21-21-10, dr 2515 ft. Northwest Louisiana Gas Co.'s Coyle 1, 21-21-10, dr 4100 ft. Ohio's Bank of Cotton Valley 4, 22-21-10, set 12½-in at 620 ft.

Winn Parish—Cherokee Pet. Co.'s Albritton 1, 27-10-1e, sd 900 ft. Dodge et al's Tremont 1, 35-13-3w, dr 1100 ft. Greer et al's Bodcaw 2, 9-11-4w, sd 50 ft. H. L. Hunt's Tremont 1, 27-10-1e, sd 1200 ft. J. C. Long's Milam 1, 26-13-3w, coring 1525 ft. Ohio's McCarthy 1, 5-12-1w, dr 1727 ft. Rowe et al's Urania 1, 26-11-1e, dk. H. M. Roarks Southern Mineral Co. 1, 19-11-3w, dr 425 ft. F. A. Schuman's Albritton 1, 27-10-1e, sd 1518 ft. Standard's Tremont 1, 1-12-2w, dr 3914 ft.

TEXAS PANHANDLE

Completions

Company, Well and Location		Initial Production Bbls.	Depth
Hartley County—			
Jas. E. McKanna & Marland Oil Co., Sheldon 1		*	3585
Collins 1			3497

WEST TEXAS

Completions

Crockett County—			
Magnolia Pet. Co., Shannon 2		*	4050
Fisher County—			
Fred Phillips et al, Webb 1			3002
Marland Oil Co., Hodges-Rochelle 1		*	3911
Jones County—			
Consolidated Oil Co. & Marland's Armand-Taylor 1		*	2514
The Gault-Brown Co., Mrs. Zips 1		*	2255
Mitchell County—			
Morrison-Thompson, Griffin 1		*	3174
Pecos County—			
The California Co., Cordova Union Fee 1		*	1859

Andrews County—Carter-Zweifel et al's Cowden 1, elev 3156 ft, top salt 1375 ft, dr 1960 ft. J. S. Cosden et al's Ratliff-Bedford 1, rig. Calvin-Belt et al's Ratliff-Bedford 1, lcn. Deep Rock Oil Co.'s W. J. Harris 1, elev 3168 ft, spd and sd. Maer-Staniforth's Taylor-Meador 1, elev 3215 ft, top salt 1650 ft, show gas dr 3013 ft. C. B. McKinnon et al's J. S. Means 1, spd and sd.

Borden County—Stivers & Guthrie's Snodgrass 1, dr 2365 ft. J. L. Kennedy et al's J. S. York 1, junked, td 855 ft.

Brewster County—Van McPhail et al's McIntyre 1, machine.

Coke County—Bronte Oil Co.'s Caldwell 1, lcn. Danciger O. & R. Co.'s Mrs. B. Byrnes 1, rig. Lipan Oil Co.'s S. M. Conner 1, elev 2045 ft, sd 1138 ft.

Concho County — Arkansas Fuel Oil Co.'s Hartgrove 1, ur cas 3236 ft. Harry Adams et al's Price 1, sd 310 ft. Explo. Co.'s Wilson-Hartgrove 1, elev 1618 ft, sd 1930 ft.

Crane County—Geo. Church & Fields' University 2, rig; University-Duoll 1, elev 2553 ft, top salt 1016 ft, dr 2780 ft. Church & Bert Weekly's University 2, elev 2557 ft, top salt 990 ft, dr 2130 ft; University 3, rig. Carl Cromwell & Pickrell's University 4, dr 300 ft; University 5, sd repairs 1980 ft; University 6, sp; University 7, 11 and 12, rigs. Eastland Oil Co. & Collett-O'Keefe's University 3 and 5, sp; University 6, lcn; University 7, dr 340 ft. Gulf Prod. Co.'s J. T. McElroy 10, rig; McElroy 11, top salt 1030 ft; dr 1990 ft; McElroy 12, top salt 1010 ft, dr 1085 ft; McElroy 13, dr 385 ft; McElroy 14, dr 175 ft; McElroy 15 and 16, rigs; University 8, rig, University 9, dr 125 ft; University 10, dr 260 ft Waddell 1-A, top salt 1270 ft, dr 1285 ft; W. N. Waddell 2, machine. Humble O. & R. Co.'s University 9, top salt 1137 ft, dr 1400 ft; University 10, rig. Independent O. & G. Co.'s University 2, elev 2556 ft, top salt 1025 ft, sd for shot in pay 2850-2960 ft; University 1-B, rig. Landreth Prod. Corp.'s State-Strip 1, dr 645 ft; State Strip 2, dr 370 ft; State-Strip 3 and 4, sp; State-Strip 5 and 6, rigs. Magnolia Pet. Co.'s University-Hardwick 2, elev 2566 ft, top salt 1065 ft, ur 2900 ft; Hardwick 4, recovered tools co 2860-2935 ft; Hardwick 5, elev 2582 ft, top salt 1150 ft; dr 2890 ft; Hardwick 6, elev 2597 ft, top salt 1100 ft, dr 2810 ft; Hardwick 3, 7 and 8, rigs; University-Lassiter 3, rig; University-O'Keefe 6, dr 810 ft; O'Keefe 7, elev 2591 ft, top salt 1270 ft, dr oil pay 3035-65 ft; O'Keefe 9, dr 2835 ft. Simms & Atlantic's University 5-A, fsh tools in pay 2944-3005 ft; University 8-A, dr 1500 ft; University 9-A, rig; University 2-C, elev 2582 ft, top salt 1110 ft, dr 2800 ft; University 3-C, dr 200 ft; University 4-C and 5-C, rigs; University 2-D, dr 255 ft; University 1-E, rig. The Texas Co.'s University 1, elev 2552 ft, top salt 1225 ft, testing pay 2830-50 ft. Tidal Oil Co. & Turman-Maxwell's University 5-F and 6-F, rigs; University 1-H, elev 2580 ft, top salt 1225 ft, dr 3028 ft; University 2-H, elev 2582 ft, top salt 1145 ft, dr pay 3026-73 ft; University 1-I, rig.

Crockett County—V. T. Bolin & Co.'s P. O. Coates 1, sd 2110 ft. Cumberland O. & G. Co.'s Couch 1, sd 3075 ft. Carl Cromwell's Powell 4, dd, dr 3415 ft. W. W. Donnelly and J. D. Young's Pierce 1, elev 2105 ft, sd 1375 ft. Humble O. & R. Co.'s Powell 1-B, rig. J. K. Hughes Dev. Co.'s Powell 2-B, sd 2535 ft. Wm. Schaffer et al's University 2, dr 515 ft. P. H. Williams et al's Powell 1, elev 2723 ft, top salt 1052 ft, dr 2350 ft. World Oil Co.'s Schneeman 1, elev 2632 ft, top salt 1035 ft, top lime 2280 ft, fsh junk 2575 ft.

Crosby County—El Capitan Oil Co.'s Slaton 1, elev 2854 ft, top salt 1270 ft, sd 3510 ft.

Culberson County—Jas. Gardner et al's Radford-State 1, sd 410 ft.

Jeff Davis County—Humble O. & R. Co.'s C. Flores 1, crooked hole 300 ft. J. K. Hughes Dev. Co.'s J. S. Means 1, sd 3000 ft.

Ector County—J. S. Cosden et al's Connell 2-A, elev 2849 ft, top salt 870 ft, sd 2150 ft; Connell 3-A, top salt 863 ft, dr salt and potash 1335 ft.

Fisher County—Barbour Oil Co.'s W. A. Cross 1-A, elev 1890 ft, dr 2550 ft. Ideal Oil Co.'s Jameson 1, hfw, dr 2555 ft. Marland & Miley Oil Co.'s Ammons 1, lcn. Marland & Vacuum Oil Co.'s Lagow 1, dr 1550 ft. Marland & Texon O. & L. Co.'s McCall 1, rig. R. W. Rainey et al's Marberry 2, sd, hfw, 2725 ft. Sinclair O. & G. Co.'s J. A. Denise 1, sd 565 ft. Stearnes & Streeter's W. A. Howe 1, sd 3542 ft. The Texas Co.'s D. S. Stevens 1, spd and sd. F. P. Zoch-McCamey et al's Lanius 1, sd 3730 ft.

Gaines County — Westheimer & Daube's Forbes 1, rotary rig.

Garza County—Emerald Oil Co.'s Boren 1, sd 2600 ft. Pandem Oil Corp's Justice 1, rig.

Glasscock County—Green et al's Oxshear 1, sd 200 ft. Merriwether & World Oil Co.'s McDowell 1, rig. R. R. Penn & Julian Pet. Corp.'s Edwards 1, elev 2502 ft, show oil 905 ft, dr 940 ft.

Tom Green County—Marland Oil Co.'s Llano Fee 1, set 8¼ in. 2652 ft. Fitzgerald & Taliaferro's Bennett 1, rig.

Hockley County—El Capitan Oil Co.'s Ellwood 1-A, sd 1520 ft.

Howard County—Bowers et al's C. Jones 1, dr 450 ft. Bristow & Merrick's Hooks 3, sd for shot 500 ft, oih, 1799-1819 ft. Fred Carey et al's Chalk 1, co 900 ft. Comet Pet. Co.'s Clay 2, dr 1400 ft. W. W. Donnelly & Mann's Martin 1, sd 1519 ft. F-H-E Oil Co.'s Roberts 1, pulled in dk, td 1441 ft. Gulf Prod. Co.'s Chalk 3, dr 1610 ft. Godley O. & G. Co.'s Hooks 1, rig. L. C. Harrison et al's Roberts 1, sd 705 ft. Lockhart & Co.'s Chalk 3, sd 1502 ft; Chalk 4, lcn abn; Chalk 3-A, sd 1401 ft. Magnolia Pet. Co.'s Kelly-Chalk 3, dr 1120 ft; G. O. Chalk 6, dr 1420 ft; Chalk 7, ur 8¼ in. 875 ft; Mary Chalk 5, dr 200 ft; Sloan-Chalk 3, dr 315 ft; Sloan-Chalk 4, dr 310 ft. Marland Oil Co.'s Chalk 5-A, elev 2682 ft, sd 1628 ft; H. R. Clay 1-C, sd, hfw, 1817 ft; Clay 1-D, elev 2676 ft, dr 2025 ft; A. M. Fisher 1, rig. Marland & Texon O. & L. Co.'s Harding 1, elev 2502 ft,

(Continued on page 80)

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3. Solid three - piece construction—no inserted parts.

4. Tested by compressed air under water—no defective parts.

5. Easily disconnected with a wrench—no force required.

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Brown County—Tower & McKanna, Inc., Wichita Falls, Shore 15, 625, C. S. Betts sur, 300 ft s of 1. Terrill, Morrissey, Thompson & Gregg, Ranger, Rumph 1, T. J. Swindle sur, 150 ft to n and w lines. O. H. Shoup, Jr., Colorado Springs, Colo., Byler 4, 43, T&NO sur. Texas Co., Cisco, Lowe 52, 622, Stubblefield sur, 2410 ft to w and 150 ft to s line. Schaffner & Ellis, Cross Plains, May 1, W. H. Irion sur, nw central part of lease. Gibson Oil Corp., Amarillo, Ssore 5, J. C. Ryan sur, 150 ft to n and w lines. Texas Co., Wichita Falls, Lowe 49, 622, Stubblefield sur, 1480 ft to w and 410 ft to s line; 50, 280 ft e of 49; 51, 450 ft e of 50; 48, 1910 ft to w and 150 ft to s line. Chas. Bell, Brownwood, Garnett 1, s 33 HT&B sur, 1371 ft w of center of e line. Anderson & Gholson, Cisco, Arms 1, 151, P. Curlong sur, 309 ft to n and 1007 ft to e line. Texas Co., Cisco, Lowe 46, 622, Stubblefield sur. 280 ft e of 43. L. H. Wentz, Eastland, Shore 15, 625, C. S. Betts sur, 300 ft s of 14; 16, 300 ft s of 15. Jas. E. McKanna, Wichita Falls, Shore 9, 625, C. S. Betts sur, 300 ft s of 6.

Brazos County — Fountain & McAshan, Brazos, McKinney 1, W. C. Sparks sur, se corner.

Brazoria County—Roxana, Houston, Bell 1, T. B. Bell sur ne corner.

Callahan County—J. H. West, Cisco, Williams 4, 2269, TE&L sur, 300 ft s of 3, E. D. McMahon, San Antonio, Connally 1, B 44, C.C.S.L. sur, 500 ft to n and 600 ft w line Williams, White. Burkett & Forster, Burkett, Kelly 1, S 3, Bayland Asy. sur, 570 ft to n and 150 ft to e line Joe. McConnell, Houston, Isenhour 1, S 3, Bayland Asy. sur, 150 ft to s and e lines. W. D. Kynerd, Dallas, McDermott B-45, S 181, C.C.S.L. sur, 150 ft to n and 500 ft to e line. W. C. Mee, Abilene, Harris 1, S 38, D&D Asy. sur, 150 ft n of center of S line. Shaw & Rathke, Wichita Falls, Miller 4, S 98, C.C.S.L. sur, 308 ft n of 2. Shackleford Oil Co., Putnam, Thompson, 1, 2270, TE&L sur, 450 ft to e and 150 ft to s line. Moutray Oil Co., Abilene, Flores 14, S 149, BBB&C sur. Kingwood Oil Co., & Beams, Cisco, Jackson 1, S 14, E. T. Ry sur, 320 ft to n and w lines. Harve Loomis, Baird, Scott 1, S 37, D&D Asy. sur, 150 ft to s and e lines. C. E. Sykes et al, Ardmore, Okla., Owens 1, S 19, D&D Asy. sur, 1050 ft to n and 450 ft to e line. Valley Oil Co., Wichita Falls, Hickman 34, S 148, BBB&C sur, 450 ft n of center of s line.

Coleman County—Amerada, Cisco, Harris 130, 162, J. Sanders sur, 440 ft e of 129.

Crane County — Independent, Fort Worth, University 1-B, S 35, B 30, Univ. Lands, 330 ft to s and w line3-A, S 46, B 30, Univ. Lands, 660 ft s of 2; 4-A, 660 ft s of 1. Humble, Wichita Falls, University 10, S 38, B 30 Univ. Lands, 660 ft nw of 9. Tidal Oil Co., Fort Worth, University 5, S 46, B 30 Univ. Lands, 660 ft n of 2; 6, 660 ft s of 3. University 1, S 47, B 30, Univ. Lands, 330 ft to w and 200 ft to s line.

Cooke County — Lynch, Stahl & Burress, Muenster, Koelzer 1, B 13, T. Scott sur, sw corner. Clark & Melat, Fort Worth, Sellers 1, B 868, J. M. Randolph 200 ft to n and w lines Pure, Mexia, Embry 1, T. J. Moss sur, 150 ft to s and e lines. Texas Co., Wichita Falls, Dannis 2, T. J. Hutchinson sur, 337 ft w of 1.

WEEKLY COMPARISON OF NEW WELLS

Following is a condensed table giving a comparison of permits or locations made for new wells during the past year in Kansas, Oklahoma, Arkansas, Louisiana, Texas, California and the Mountain States:

	Week Ending May 13	Previous Week	Total This Month	Total This Year	This Week Last Year	This Month 1926	Total Same Date 1926	Year Total 1926
Arkansas	6	4	10	160	43	62	535	910
California	31	36	67	613	28	44	710	1,293
Louisiana	22	14	36	234	26	51	503	1,318
Kansas	9	7	16	447	35	82	823	1,745
Oklahoma	107	79	186	1,725	119	244	2,276	5,165
Texas	168	187	355	4,174	227	451	4,560	12,158
Mt. States	15	2	17	278	...	...	...	...
Total	358	329	687	7,631	478	934	9,407	22,589

Carson County — Viteck Oil Co., Fort Worth, Garner 1, S 113, B 4, I&GN sur, ne corner. Marland, Fort Worth, Jordan 3, S 93, B 4, I&GN sur, 990 ft to n and 250 ft to e line; 4, 1650 ft to n and 330 ft to e line. Alaska Petroleum Co. Inc., Amarillo, Cockrell 2, S 2, B 3 D & SE sur, 233 ft to w and 300 ft s line.

Clay County—W. L. Grubbs, Bellvue, Gault 1, 2816, TE&L sur, 450 ft to w and 168 ft to s line. Empire Holding Corp., Wichita Falls, Barry 6, 2642, TE&L sur, 315 ft n of 5. G. C. Rounsaville, Antelope, Barry 1, 2642, TE&L sur, 150 ft to s and w lines.

Chambers County—Mills Bennett Prod. Co., Houston, Kirby Pet. Co. 1, H. Griffith sur, nw central part of lease.

Duval County—Humble, Houston, Kohler 6, 400, 600 ft to s and 60 ft to w line.

Eastland County — C. M. Root, Eastland, Watson 2, S 37, B 4, H&TC sur, 150 ft to s and w lines. Chestnut & Smith, Breckenridge, Spencer 1, S 15, B 3, H&TC sur, 330 ft to s and e lines Simms Dallas, Dingler 1, S 16, J. F. Sapp sur, 330 ft to n and e lines. R. R. Rankin, Midland, Cude 1, F. Roberts sur, 160 ft to n and e lines. P. L. Hoffman, Cisco, Poe 1, S 15, B 3, H&TC sur, 320 ft to n and w lines. Prairie, Ranger, Poe 2, S 15, B 3, H&TC sur, 330 ft to s and e lines. Cranfill & Reynolds, Cisco, Collins 3-B, S 3 H&TC sur, 350 ft to w and 450 ft to s line. L. G. Adams, Cisco, Nix 1, W. R. Stoneham sur, north central.

Foard County — Fain-McGaha Oil Corp., Wichita Falls, Mathews 1, GC&SF sur, 150 ft to w and 900 ft to s line.

Freestone County—McDonald Bros., Corsicana, Meador 6, M. Boren sur, nw corner.

Gaines County—Westheimer & Daube, Ardmore, Okla., Birge-Forbes 1, Lge. No. 308, 200 ft to nw and 3600 ft to ne line.

Gray County—Empire, Wichita Falls, Cubine 1, S 36, blk 25, H&GN sur, 330 ft to n and e lines.

Hutchinson County — Phillips, Bartlesville, Okla., Bivins 1, S 86, lk 46, H&TC sur, 330 ft to e and 464 ft to s line. Alamosa Oil Co., 110½ E. Fifth St., Amarillo, Sanford 1, S 83, blk 46, H&TC sur, 97 ft to s and 264 ft to e line. S. D. & W. W. McIlroy, Box 1026, Amarillo, Cockrell 1, S 4, blk B3, D&SE sur, 220 ft to n and 283 ft to e line; 2, 660 ft to n and 283 ft to e line.

Howard County—F. M. Greene, Fort Worth, Oxsheer 1, S 6, blk 34, T&P sur, center; Clay 2, S 126, blk 29, W&NW sur, 250 ft to s and e lines.

Henderson County — Henderson Oil Co., Philadelphia, Pa. Perry 1, S. Jones sur, 300 ft to n and 1200 ft to e line.

Jack County—Kuykendall 1, Wm. Scott sur, 330 ft to n and w lines.

Jefferson County—Gulf, Houston, Oakwood 11, P. Humphreys sur, 60 ft to e and 50 ft to s line. Yount-Lee Oil Co., Beaumont, McFaddin-Weiss & Kyle Land Co. 32, blk 1, P. Humprheys sur, 980 ft to e and 384 ft to n line; 33, 626 ft to n and 383 ft to e line.

Kinney County—W. A. Stephens, San Antonio, Clamp 1, No. 346, sec 1492, center.

Live Oak County — Delta Oil Co., Inc., Burkburnett, McNeil 1, J. Curry sur, center.

Liberty County—Gulf, Houston, Phoenix 59, J. Devore sur, 1680 ft to n and 783 ft to e line.

Medina County—C. W. Simpson, San Antonio, Blockee 1, No. 464 H. Weber sur, 150 ft to n and 305 ft to w line. Medina Synd., San Antonio, Nixon 1, No. 13, 281 ft to n and 1650 ft to e line. Golden West Oil Co., San Antonio, Schmidt 6, blk 7, No. 15, P. E. Durst sur, 300 ft n of No. 4.

Montague County — Continental, Wichita Falls, Crow 1, J. Chambliss sur, 150 ft to n and w lines. C. P. Burton, Wichita Falls, Haralson 1, Howard sur, 150 ft to s and e lines. Arco Oil Co., Wichita Falls, Maddox 1A, J. W. Chambliss sur, 150 ft to w and 200 ft to s line. Wm. McGinley, Fort Worth, Gist 1, J. Chambliss sur, 110 ft to w and 672 ft to s line.

Marion County—J. D. Lynch, Sioux Falls, S. D., Stiles 1, N. G. Headright sur, 200 ft to s and w lines.

McCullough County — J. C. Van Bebber, Lohn, Roberts 1, S 102, 600 ft to n and 1000 ft to e line.

Milam County—Noack & Lanning, Rockdale, Rowland 1, Rockdale sur, 150 ft n of center of s line; Demke 1, Wm. Allen sur, ne corner.

Mitchell County—California Co., Colorado, Foster 3, S 6, blk 29, T&P sur, 1320 ft w of 1.

Nolan County—Lowe, Delaney & Carter, De Leon, Allen 1, S 58, blk X, T&P sur, 475 ft to n and 237 ft to w line.

Navarro County—H. G. Johnston, Corsicana, Jester 1, J. Peoples sur, 900 ft to nw and 582 ft to sw line.

Orange County — Miller Drilling Co., Fort Worth, Brown 1, N. Richey sur, w central.

Pecos County — Allsman & Bell, McCamey, Pecos River 1, S MF, 10017 Kilpatrick sur.

Palo Pinto County — T. G. Shaw, Fort Worth, Albert 1, 150 ft to s and e lines; Easeley 1, 150 ft to w and 460 ft to s line.

Shackleford County — T. G. Shaw, Fort Worth, Brotherhood 17, S 36, Univ. Lands sur, 300 ft e of 3; 18, 300 ft e of 17. Dr. C. W. Wallace, Wichita Falls, Waters 17, blk 33, Univ. Lands sur, 600 ft s of 1. Sinclair, Fort Worth, Nail 1, S 150, E. T. Ry sur, center. Scott & Walker, Wichita Falls, Huskey 12, S 548, TE&L sur, 2244 ft to ne and 300 ft to se lines.

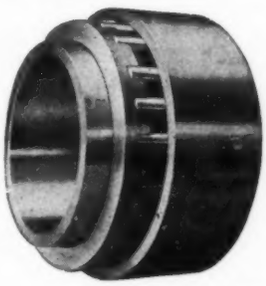
Sterling County — G. B. Orr, San Antonio, Reed Est. 1, S 16, blk 30, W&NW center.

Sherman County — Marland, Fort Worth, Flores 1, S 64, blk 3T, T&NO sur, center.

Throckmorton County — Falls Prod. Co., Wichita Falls, Graham 2, 992, TE&L sur, 300 ft s of 1.

Upton County — Humble, Wichita Falls, Ricker 5, No. 5, M. S. Denton sur, 4600 ft to nw and 2310 ft to ne line. Tidal, Fort Worth,

Stamina-SAFETY-Speed and SMOOTHNESS *are surely needed here*



American Heavy Duty Type "C" Roller Bearings have established a higher standard of safety, have made possible a desirable increase of speed and have allowed a new smoothness of operation in the oil field machinery and equipment in which they are being used.

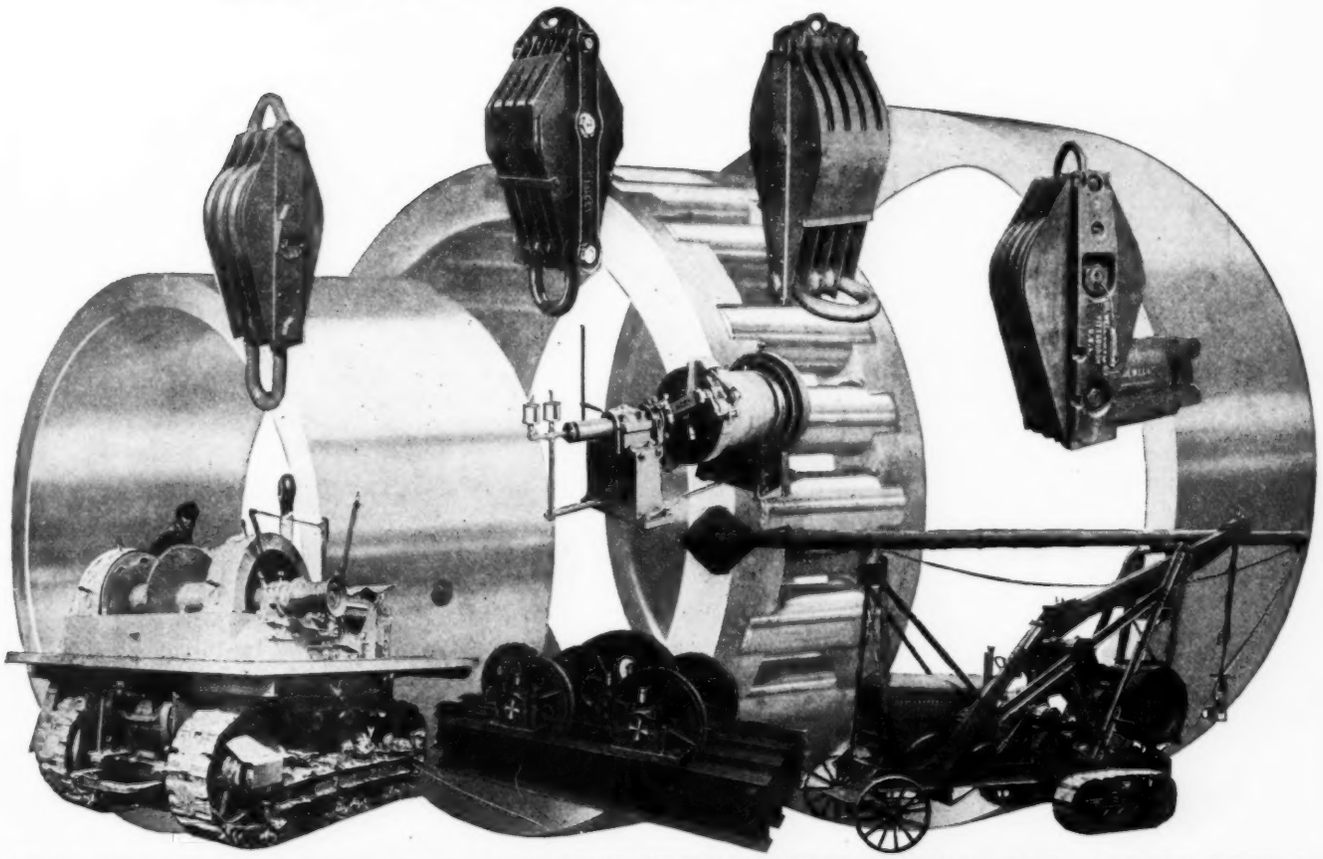
Supporting these advantages has been the real stamina of their steel, a steel that has proven itself, without question, to be the best metal procurable for bearings that have to meet only the severest kinds of service.

It is a steel among steels, used in a bearing among bearings.

They are exclusively industrially used bearings. They do not know what it is to have a *soft* job. They are too good for *easy* bearing duties. Oil field equipment, such as illustrated, are really worthy of this kind of bearing steel—and need it. Not only are these Heavy Duty bearings needed in these types of equipment but this need is becoming widely recognized. Several manufacturers have quickly standardized upon them; others are using them to solve old bearing problems; and many more are planning their adoption to improve their products.

Those who use oil field equipment are wise in knowing whether it is American Heavy Duty equipped. If so, natural hazards are cut down, safety is promoted time is saved and more satisfactory equipment in every way is guaranteed.

It is not difficult to apply American bearings to oil field service, so ***"get them in the first place; use them to replace plain bearings."***



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The STANDARDIZED BEARING for OIL COUNTRY PURPOSES

Say you saw it in The OIL WEEKLY

Hughes 1, No. 4, Wm. Teer sur, 330 ft to s and w lines.

Wichita County — Staley, Wynne & Co., Wichita Falls, Kemp & Kempner 1, blk 82, W. V. F. L. sur, 150 ft to s and e lines. Kent Bros., Burkburnett, Callen 1, A. Brigham sur, 150 ft to n and 450 ft to w line. Kemrow Co., Wichita Falls, Roller 3, W. A. Grady sur, 170 ft to n and 450 ft to e line. Petroleum Prod. Co., Wichita Falls, Munger 1, blk 31, W. V. F. L. sur, 750 ft to w and 150 ft to n line. Shappell Oil Co., Wichita Falls, Kemp & Kempner A 8, blk 18, W. V. F. L. sur, 450 ft to n and e lines. Beaver Drilling Co., Iowa Park, Chilton 1, J. W. Campbell sur, 1575 ft to n and 150 ft to e line. White & Duncan, Wichita Falls, Foster & Allen 2, S 1, SA&MG sur, 264 ft to e and 170 ft to s line. Southern Crude Purchasing Co., Shreveport, La., Hendrick 1C4, S 33, blk B5, School sur, 970 ft to n and 330 ft to e line; Hendrick 1C1, 330 ft to n and e lines; 1C2 (Winkler County) 660 ft w of 1. J. E. Ward, Wichita Falls, Crisp 1, S 22, H&GN sur, 150 ft to s and w lines. J. E. Dunaway, Wichita Falls, Waggoner 4, S 33, blk 5, H&TC sur, 300 ft w of 1. Cook & Reeder, Harvey-Snider Bldg., Wichita Falls, Overby 4, J. M. Sharp sur, 125 ft to w and 160 ft to s line.

Webb County—Cole Petroleum Co., Laredo, Benavides 45, S 22, blk 2, M. Arispe sur, 450 ft to s and w lines; Benavides 44, S 411, blk 5, GC&SF sur, 638 ft to n and 681 ft to e line. Magnolia, Dallas, Garza 7, blk 58, J. W. Littig sur. M. A. Radford, Mirando City, Riser 1, S 1617, blk 12, CCSD&RGNG sur, 450 ft to n and 150 ft to e line. Morgan, O'Hearn & Seacord, Laredo, Webster 1, No. 684, 150 ft to n and e lines.

Wharton County — Hyde Production Co., Houston, Robbins 1, S. F. Austin sur, 50 ft to n and e lines. M. L. Bass, Houston, Kelly 1, S. F. Austin sur, 100 ft to n and e lines. Boling Oil Co., Houston; Carson 4, S 22, Missouri Land Co. sur, 150 ft sw of 3.

Wilbarger County—Milham Corp., San Antonio, Waggoner 16B, S 31, blk 4, H&TC sur, 300 ft sw of 11. Murchison Oil Co., Wichita Falls, Waggoner 2B, S 51, blk 4, H&TC sur, 550 ft to n and 150 ft to w line. Lencook Oil Co., Electra, Waggoner 7, S 30, blk 5, 330 ft ne of 1. T. W. Walker, Vernon, Lutz 1, S 39, blk 12, H&TC sur, 150 ft to w and 450 ft to s line. Consolidated & Cosden, Wichita Falls, Waggoner 4, S 57, blk 4, H&TC sur, 600 ft to n and 150 ft to w line.

Wise County—J. H. Winemiller Corp., Tulsa, Beall 1, S. Worthington sur, 1050 Vs to w and 250 Vs to n line.

Winkler County — Humble, Wichita Falls, Hendricks B1, S 34, blk 135, School sur, 330 ft to n and w lines. Southern Crude Purchasing Co., Shreveport, La. Hendricks 1C4, S 33, blk B5, School sur, 970 ft to n and 330 ft to e line; 1C1, 330 ft to n and e lines; 1C2, 660 ft w of 1. Independent, Fort Worth, Hendricks 2A, blk B5, S 34, School sur, 330 ft to n and w lines.

Williamson County—Petoskey Oil Co., Petoskey, Mich. Stewart 1, J. Dovilla sur, 400 ft to n and 300 ft to w line.

Wheeler County—Continental, Wichita Falls, Jackson 3, S 11, blk 27, H&GN sur, 685 ft to n of 1.

Young County—Holbrook & Woods, Wichita Falls, Davis 1, 1395, TE&L sur, 450 ft to e and 750 ft to s line. Pitzer & West, Breckenridge, Burnett ., No. 7, T&NO sur, ne corner. Continental & Francis, Wichita Falls, Benson 6, 1450, TE&L sur, 300 ft s of 5. Atkinson & Sandefer Oil Corp., Breckenridge, Donnell 2, 1111, TE&L sur, 1000 ft s of 1. E. C. Stovall, Graham, Fee 7, blk 28, J. Tobin sur, 150 ft to s and w lines. Scott & Ginsburg, Wichita Falls, Garvey 1, blk 4, GB&N sur, 150 ft to s and w lines.

Zapata County—H. H. Galbraith, Hebbronville, Hirsch 1, No. 595, E. Javali, ne corner. Duke-Langford Oil Co., Wichita Falls, Redondo 12, blk 50, W. R. Duke, 1575 ft to w and 1700 ft t s line; 14, 1320 ft t w and 1625 ft to s line; 15, 3220 ft to n and 1280 ft to w line; 19, 1770 ft to w and 1626 ft to s line; 20, 1845 ft to w and 1825 ft to s line; 7, 1200 ft to s and 1320 ft to w line; 13, blk 29, 1220 ft to w and 1450 ft to s line; 16, 1120 ft to w and 3820 ft to n line; Martina 17, 1020 ft to w and 1150 ft to s line; 18, 820 ft to w and 1225 ft to s line; Martina 21, blk 24, 1920 ft to w and 2000 ft to s line; 22, 1920 ft to w and 2180 ft to s line; Martina 6, blk 6, 1770 ft to w and 1250 ft to s line.

ARKANSAS

Columbia—Atlantic, Couch 1, 23-17-20, 330 ft s and 330 ft w of ne nw sw.

Nevada—Ozan Oil Co., Ellis 6, 2-14-21, 150 ft n and 150 w of se.

Ouachita—F. A. Book Trustee, Johnette 3, wo 33-15-16, 150 ft s and 150 w of ne cor w½ sw ne.

Union—National Cons. Pet. Corp., Fagg 1, 8-16-16, nw sw sw. Ohio Oil Co., Murphy 5, wo 9-16-15, ne sw ne. Rice et al, Newton 1, 13-17-16, Center of E line se ne.

LOUISIANA

Bienville—Edwin J. Forest, Arcadia, Perritt 1, 11-17n-6w, 1920 ft s and 210 ft w of ne.

Bossier—C. O. Tate, Trustee, Camden, Dodson 1, 15-23n-12w, 330 ft n and 330 ft w of se sw.

Caddo—J. H. Askew, Shreveport, Ellett 1, 12-19n-16w, 1014 ft n and 2080 ft w of se. Bayou State Oil Corp., Shreveport, Hoss 29, 24-22n-15w, 320 ft s and 200 ft w of ne nw sw. Dixie Oil Co., Inc., Shreveport, Dillon 88, 13-21n-15w, 2415 ft n and 775 ft e of sw. Double I Oil Co., Grayville, Ill., Spell 10, 15-21n-15w, 43ft n and 452 ft w of se of ne. Lewis Oil Corp., New York City, Raines 18, 22-21n-15w, 200 ft n and 1550 ft w of se ne. Luby Oil Co. Inc., Hosston, Levee Board 15, 23-22n-15w, 660 ft n and 350 ft e sw sw nw. Standard of La., Shreveport, Hart 12, 34-21n-16w, 200 ft n and 140 ft e of sw nw of nw.

Claiborne—C. O. Tate, Trustee, Camden, Ark., Maddox 1, 21-23n-7w, 33 ft n and 330 ft e of sw ne se.

De Soto—Mr. John W. Hooser, Dallas, Tex-

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The Wagner Philadelphia Oil Well Unit—designed by well informed and up-to-date engineers — is of staunch construction. Compared to the present standard rig the Wagner Unit is less expensive and of higher efficiency.

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Motors—Single and Polyphase. Fynn-Weichsel Motors.
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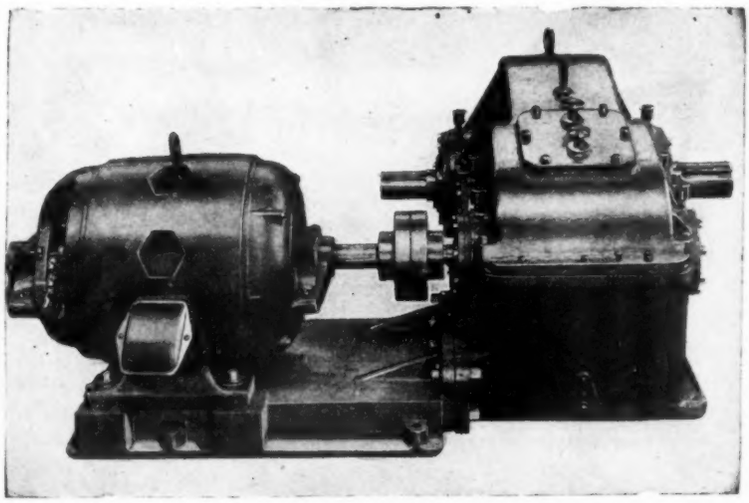

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SS-40+ Sprocket Chain SS-124+ (Plus)

Say you saw it in The OIL WEEKLY

as, Lanier 1, 5-11n-11w, 200 ft n and 200 ft e of center.

Grant—Mr. J. L. Holmes, Georgetown, Fee 3, 17-9n-1e, 150 ft s and 50 ft e of nw ne of se.

LaSalle—La. Oil Ref. Corp., Shreveport, Tremont Lbr. Co. B-1, 30-10n-2e, 121 ft s and 173 ft w of ne nw, Tunica Pet. Corp., Shreveport, L. & A. Oil Co. 28, 9-7n-2e, 300 ft s and 300 ft e of nw sw.

Ouachita—Jordan Drilling Co., Monroe, Montgomery 2, 13-18n-4e.

Sabine—Arkansas Fuel Oil Co., Shreveport, Horne et al 1, 33-10n-12w, 1630 ft e and 2820 ft n of sw; Logan Oil Co. 8, 33-10n-12w, 345 ft s and 325 ft w of ne nw of nw; Logan Oil Co. 9, 33-10n-12w, 650 ft s and 1014 ft e of nw sw nw; Moore 1, 32-10n-12w, 317 ft n and 319 ft. w of se se sw; Rembert 1, 5-9n-12w, 317 ft s and 319 ft e of nw nw ne; Williams 1, 33-10n-12w, 760 ft n and 1596 ft w of se ne.

Winn—Humble, Shreveport, L. & A. Oil Co. 22-A, 33-10n-2w, 150 ft s and 150 e of nw ne.

OKLAHOMA

Caddo County—English Drilling Co., Abernathy 5, c se se 31-6n-9w. Mason et al, Jones 1, c w½ ne 17-5n-14w.

Carter County—Magnolia, Adams 12, nw ne ne 12-2s-3w. Schermerhorn & Roxana, Williams 1, ne nw 11-2s-3w.

Creek County—Silurian Oil, W. Starr 24, sw ne 17-16-7e. Mid-Continent Pet. Friday 2, ne nw se 31-15-9e. Future Developing Co., Holder 1, sw nw nw 31-17-10e. J. H. Wright, Tahkaney 19, nec nw nw 24-17-10e. Ted Ray Oil Brink 3, sw se sw 13-17-10e. Margay Oil, Wilcox 2, sw 1-17-10e. Amerada Pet., McIntosh 1, ne nw 30-17-9e. Pure Oil, Kernal 6, twin, nw se ne 30-14-8e.

Grady County—Carter Oil, Cassie Kerans 2, se ne 21-3n-5w. Prairie, Russell 5, se ne nw 21-3n-5w; Russell 6, nw ne nw 21-3n-5w. Hall & Briscoe, Dryden 3, sw ne se 35-5n-8w. J. B. Nichlos, Reed 3, ne nw nw 25-5n-8w. Commercial Developing, Gerard 1, ne sw 30-6n-6w.

Kay County—Comar Oil, Buell 1-A, sw ne 21-29-1w. Marileen Oil & Phillips, Payne 1, sw 17-27-1w.

Logan County—T. B. Slick, Signs 1, nw se 20-17-1e.

McIntosh County—John Aggas et al, Perryman 1, nw 11-12-15e.

Murray County—Galt Brown Oil, Davis 1, c e l w½ se nw 21-1n-4e.

Noble County—Mid Co. Oil, Brumfield 3, ne nw nw 22-23-2w.

Okfuskee County— Empire Gas & Fuel A. Grayson 1, nw ne nw ne 30-11-10e.

Oklahoma County — Cromwell O. & G., Thompson 1, sw ne ne 15-13-3w.

Okmulgee County—J. W. Roberts, B. Carter 2, ne se 10-15-14e. Nicholson Corp., Hawkins 1, c nw sw 13-11-13e.

Osage County—Phillips, se ne sw 17-27-6e. Galt Brown Oil, se ne 20-27-7e. Kewanee O. & G. Co. 1, nw ne 3-26-6e. A. G. Oliphant, se sw se 19-25-6e. Texas, sw se se 30-25-5e. J. C. Stine 7, nw se se 9-21-12e.

Pawnee County—Pax Oil, Greenwood 1, nw se 19-20-9e.

Payne County—Shaffer Oil & Ref. Harris 1, ne se sw ne 9-18-5e.

Pottawatomie County—Amerada, Cowden 2, sw se sw 4-9-5; Cowden 4, sw 4-9-5; Cowden 5, ne se sw 4-9-5. Barnsdall, Heley 1, sw nw se 4-9-5; Holey 2, se nw se 4-9-5. Gypsy Oil, Doebling 1, se nw 4-9-5. Independent & Darby Pet., Knapp 2, ne 8-9-5. Independent O. & G. Knapp 5, se nw ne; Knapp 4, ne se ne 8-9-5. Barnsdall, Gibson 3, se sw ne 9-9-5; Gibson 5, se nw ne 9-9-5; Gibson 6, ne sw ne 9-9-5; Gibson 7, nw se ne 9-9-5; Gibson 8, sw nw ne 9-9-5. J. R. Crosbie et al, Bryant 2, nw sw nw 9-9-5. Magnolia & Wrightsman, Bryant 3, ne se nw 9-9-5; Bryant 4, ne sw nw 9-9-5. Tidal Oil, Watkins 4, nw ne nw 9-9-5; Watkins 5, se nw nw 9-9-5. Sinclair, Foreman 1, se sw ne 18-9-5. Philmac & Marland, Dobbs 3, se ne se 8-9-5; Dobbs 4, nw ne se 8-9-5. Shaffer Oil & Ref., Killing 1, ne se 24-7-3; Phillips 2, nw sw 19-7-4e.

Seminole County—Barnsdall, J. Bruner 1, ne nw 10-9-5. Texas, Brown 3, nw sw nw 10-9-5. Roxana, Spencer 2, nw sw nw 12-9-5. Skelly, Spencer 2, ne sw nw 13-9-5. Mid-Kansas, Anderson 2, nw ne ne 14-9-5. Barnsdall, D. Smith 3, nw ne ne 15-9-5. Prairie, Graham 1, sw se 3-9-5; Stidham 6, sw ne 15-9-5. Gypsy, D. Smith 1, nw ne 15-9-5. Barnsdall, Henry 2, sw 14-9-6. Carter, Killing 12, nw 23-9-6; W. Cudjo 2, ne se sw 34-9-6. Gypsy, T. Cudjo 6, se nw se 34-9-6. Barnsdall, R. Cudjo 1, sw nw sw 3-9-5. Magnolia, Chesparsy 1, nw ne nw 2-8-6. Prairie, Bank Harbor 1, ne nw 31-8-7. Pure Oil, Reed 18, ne se nw 14-8-7. Pure Oil, Reed 19, ne nw se 14-8-6; Red 20, nw ne se 14-8-6. Prairie, Annie Gahagan 3, nw se ne 23-8-6; Annie Gahagan 4, sw se ne 25-8-6. Pure Oil, Strothers "D" 2, se ne nw 14-8-6. Texas, Reed 5, sw ne ne 14-8-6. Carter, Turlington 1, sw 22-8-6. I. T. I. O., W. Bowlegs 4, se nw ne 22-8-6; Bowlegs 5, nw sw ne 22-8-6. Prairie, E. W. Whitney 4, sw nw nw 23-8-6. I. T. I. O. Bowlegs 6, se nw ne 22-8-6; Bowlegs 7, ne sw ne 22-8-6; Barnett 3, ne sw nw 24-8-6; Youngblood 4, se nw nw 24-8-6; Hull 2, ne nw se 26-8-6. Texas, Reed 6, se sw ne 14-8-6. Carter, Lena 1, se 15-9-5; Creamer 3, ne sw se 34-9-6, Harjoche 7, se nw nw 14-8-6. Sinclair, Walker 3, se ne ne 22-8-6; Walker 4, sw ne ne 22-8-6. Mid-Continent Pet. Corp., Work 2, sw ne nw 24-8-6; Work 3, nw se nw 24-8-6. Magnolia, Ramsey Walker 3, se nw nw 32-8-6. Shaffer O. & R., Jones 11, nw se nw nw 32-8-8e.

Stephens County—Medlin et al, Taliaferro 1-A, se ne sw 27-1s-8w. Gant et al, Clark 1-A, se sw 25-1s-9w. Magnolia, Johnson 5, se ne 24-1s-9w.

Tulsa County—Enfisco Oil Corp., Unallotted 1, ne 18-19-11e.

MOUNTAIN STATES

WYOMING

Ogden-LaBarge Oil Co., Lat 2, 18-27-112. E. J. Sullivan et al, 3, 32-58-99. Shendle Oil Corp., 1, 24-51n-93w. Montana-Wyoming No.

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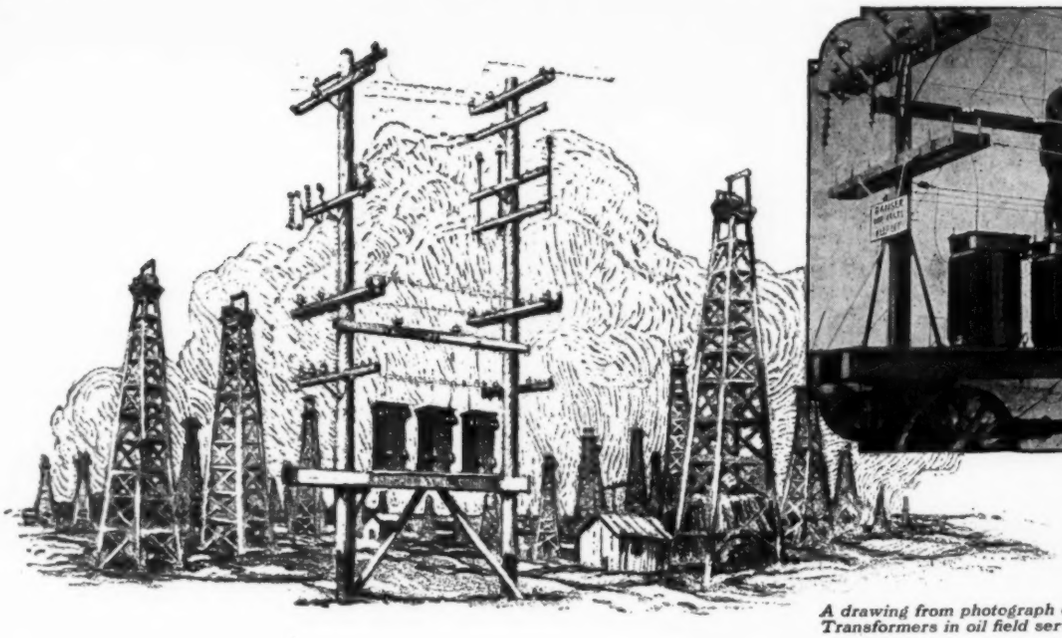
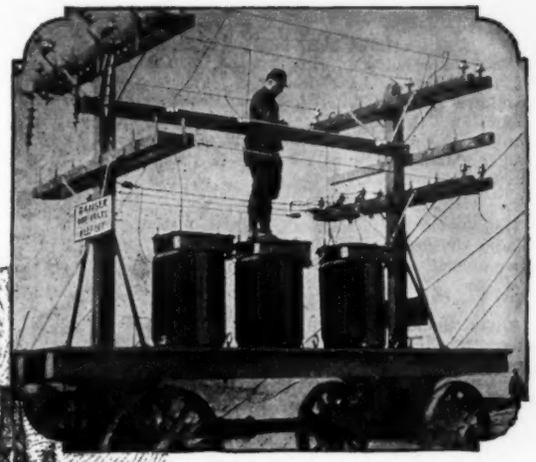


A drawing from photograph of bank of G-E Transformers in oil field service



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MONTANA

Homestake Exploration Co., 2, se 2-35n-2w. Montana-Wyoming Oil & Gas Co., 1, 20-53n-101w.

KANSAS

Butler County—Empire Gas & Fuel, Hutchinson "B" 7, se sw ne 27-27-5e. Phillips, McLean 1, ne se ne 17-27-6e.

Chase County—Kewanee O. & G. Co., Lipps 2, c nw nw 36-18-6e. White Eagle Oil & Ref. Lipps 2, c se ne 31-18-7e.

Cowley County—Furgeson & Hait, Furgeson 1, se sw 26-30-8e.

Elk County—Arkansas Fuel Oil, Eaglin 1, sw 15-29-10e. Elmwood Oil, Millis 2, c s l n½ sw 14-30-10e.

Greenwood County—Buck et al, Mosby 1, ne sw sw 34-23-8e.

Reno County—Pryor & Lockhart, Keesling 1, c ne 35-22-10w.

CALIFORNIA

Arroyo Grande—San Luis Synd. No. 1, 31-13.

Huntington Beach—Standard Oil Co., P. E. 9, 10-6-11.

Inglewood—Standard Oil Co., Baldwin-Cienega 62, 16-2-14.

Kern River—Standard Oil Co., No. 7, 15-28-27; No. 8, 15-28-27. General Pet. Corp., Still 1, 26-28-27.

Los Angeles County — Southwest Pet. Co., Ramsaur 1, 4-3-13.

McKittrick—Ozena Oil Co., No. 1, 27-29-21.

Midway—Standard Oil Co., No. 4, 27-31-23.

Orange County—O. K. Carr, No. 1, 13-8-8.

Richfield—General Pet. Corp., Pedeco 1, 33-3-9; Pedeco 2, 33-3-9.

Santa Barbara County—Miley Oil Co., Goleta 5, 3-4-29. Levi Smith, No. 2-A, 3-4-29.

Seal Beach—Associated Oil Co., Hellman 16, 11-5-12. General Pet. Corp., Wasem 10, 3-5-12. Ring Pet. Corp., No. 10, 3-5-12. Geo. F. Getty, Inc, S. B. 12, 3-5-12; S. B. 13, 3-5-12. Italo-American Pet. Corp., Italo 20, 3-5-12. White Eagle Pet. Co., No. 1, 3-5-12; No. 2, 3-5-12; No. 3, 3-5-12; No. 4, 3-5-12; No. 5, 3-5-12. California American Oil Co., No. 1, 3-5-12. California Eastern Oil Co., Hodges-Wilson 1, 3-5-12. Reuben R. Horwitz, No. 1, 3-5-12. Petroleum Securities Co., Horwitz 1, 4-5-12; James 1, 3-5-12.

Torrance—C. C. M. O. Co., Del Amo 76, 17-4-14.

WILDCATS

(Continued from page 72)

top salt 1146 ft ,top lime 3125 ft, water broke in on oil pay 3163-3230 ft. Marland & F. P. Zoch's Guitar Ranch 1, dr 2140 ft; Jones 1, dr 505 ft. Owen-Sloan's Roberts 1, spd and sd. Pure Oil Co.'s Chalk 1, cmt cas 1702 ft; Chalk 3, cmt cas 1590 ft; Hooks 1, rotary rig.

Hudspeth County—Lockhart & Co.'s Gardner-Moseley 1, sd 140 ft.

Irion County—Cashdollar & Whitmire's Abe Meyer 1, elev 2050 ft, dr 3550 ft; Bird-Roberts 1, elev 2065 ft, sd 2500 ft.

Jones County—Atlantic & Landreth's Howell 2, sd 2700 ft. Bateman & Campbell's Southard 1, co 1990 ft. F. P. Campbell et al's Herndon 1, dr 2165 ft. R. F. Garland & Co.'s Glynn 1, lcn. Hurley Gas Co.'s Largent 1, dr 2825 ft. Gillette & Hickey's Young 1, sd 1200 ft. Grisham-Hunter & Wildman Pet. Corp.'s Williams 1, fsh 2820 ft. Hutson & Weaver's Smith 1, sd 700 ft. Kirk & Brewer's Milsap 1, dr 2320 ft. Manhattan Oil Co.'s S. W. King 1, dr 920 ft. Marsten Oil Co.'s Howell 1, sd 2545 ft; Swann 1, dr, hfw, 2485 ft. Mid-Continent Pet. Corp.'s H. Evans 1, ur 2900 ft. Stebbins O & G. Co.'s J. M. Higgs 1, sd 1615 ft. W. G. Stough et al's J. P. Willis 1, sd 825 ft. Phillips Pet. Co.'s Howell 1, lcn. Winters 3, rig; Winters 4, fsh 2260 ft; Thornton 1, sd, hfw, 3088 ft; Vestal 1, dr 385 ft. Swensondale Oil Co.'s Canton 1, co 1655 ft. J. L. Tomberlin et al's Clapp 1, fsh 1350 ft. World Oil Co.'s Boyd 1, sd 2615 ft. Kingston's (was Zeigler) J. W. Reeves 1, sd 1925 ft.

Kent County—Douglas Oil Co.'s Scoggins 1, dr 1805 ft. Marland & Texon's Bilby 1, lcn.

King County — Gibson-Johnson's Burnett 1, elev 1715 ft, dr 1505 ft. The California Co.'s Spikes 1, lcn. Mid-West Explo. Co.'s Patton 1, elev 1706 ft, set cas 1000 ft. Phillips Pet. Co.'s Burnett 1, elev 1820 ft, dr 2860 ft. Sinclair O. & G. Co.'s Burnett 1, elev 1804 ft, dr 1050 ft. J. L. Pattison et al's Patton 1, elev 1616 ft, dr 2065 ft. White Eagle O. & R. Co.'s Burnett 1, elev 1818 ft, dr 1575 ft.

Loving County — Owen-Sloan's Johnson 1, sd 700 ft. Kingwood Oil Co.'s Moore 1, spd and sd.

Mitchell County—The California Co.'s Foster 3, machine. Magnolia Pet. Co.'s Mary Foster 4, dr 3175 ft; T. L. McKinney 1, dr 2675 ft; W. W. Watson 2, dr 3265 ft. Paul Teas et al's Ed. Strain 1, fsh 3225 ft. Robert Thraves et al's C. Way 1, rig. B. E. Walters et al's Dollen 1, sd, hfw 3955 ft.

Nolan County—Phillips Pet. Co.'s Scott 1, dr 287 5ft. Thomas & Reynolds et al's Allen 1, dr 2880 ft. John Winemiller Corp.'s W. L. Booth 1, sd 960 ft. Henry Zweifel et al's Longbotham 1, sd 1310 ft.

Pecos County—Geo. Anderson et al's Sherbino 1, lcn. Allsman & Bell's Pecos River

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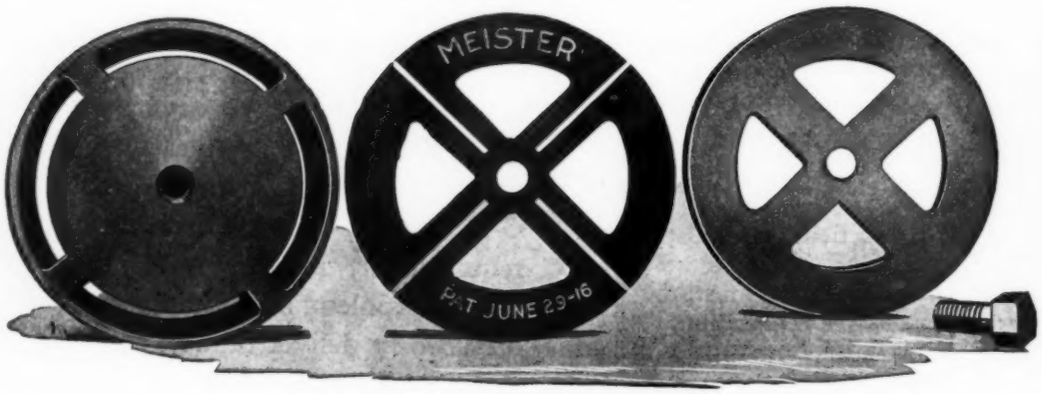

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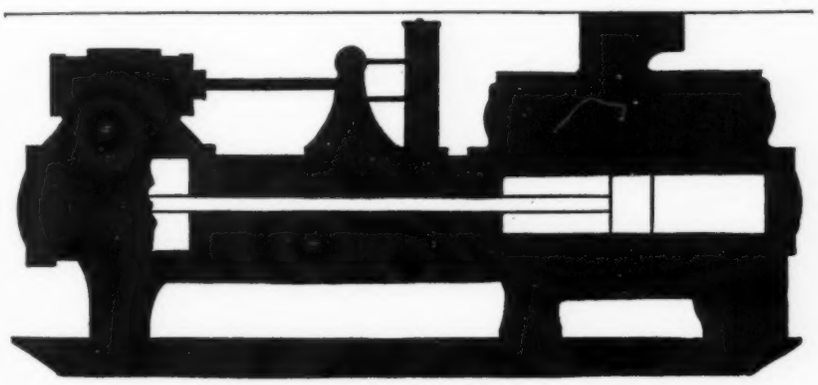

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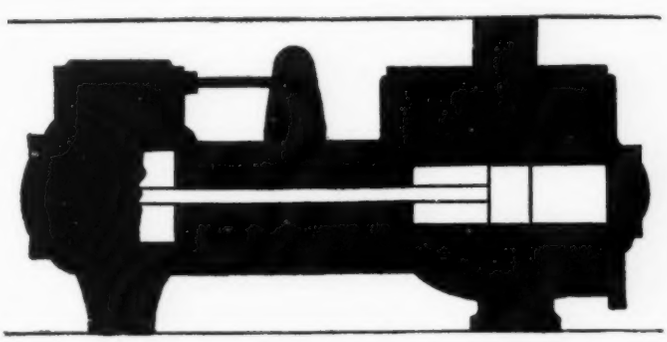

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No. 4	catches	10 -in.	to	8 -in.
No. 5	catches	12½-in.	to	10 -in.
No. 6	catches	15½-in	to	12½-in.
No. 7	catches	20 -in.	to	15½-in.

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Presidio County—Hadlock & Miller's Tootle 1, sd 2550 ft.

Reagan County—Tidal Oil Co.'s University 1, elev 2819 ft ,top salt 1302 ft, dr 2350 ft.

Reeves County—Deep Rock Oil Co.'s Caldwell 1, dr 3570 ft. Humble O. & R. Co.'s T&P Fee 1, dr 2175 ft. Explo. Co.'s Kinney 1, spd and sd. World Oil Co.'s Duff 1-A, co; Biggs-Holder 1-A, sd 1610 ft.

Runnels County—Ladd-Hill et al's McMillan 1, sd, hfw, 1400 ft. Noble O. & G. Co.'s Simms 1, spd and sd.

Scurry County—Northwest Co.'s Stinson 1, sd 4345 ft.

Sterling County—Bill Little et al's Fisher 1, machine. Orr et al's Neal Reed 1, lcn. P. H. Williams et al's Clark 1, sd 1020 ft.

Stonewall County—R. F. Garland & Co.'s Ward 1, dr 1420 ft.

Taylor County — Brown Producing Co.'s Henslee 1, spd and sd. Gibson-Johnson et al's J. F. Hendry 1, sd for cas 1860 ft. Grisham-Hunter Corp.'s Huddleston 1, dr 2635 ft. Humble O. & R. Co.'s Mattie Jacobs 1, dr 2355 ft. Halbert et al's Hunt 1, sd 1610 ft. Dorning & Perrine's J. A. Hammer 1, sd 455 ft. Mid-West Explo. Co.'s Dora Smith 1, fsh 2905 ft; Toombes 1, dr 1870 ft. Morrison & Thompson's Rose 1, fsh parted cas 2539 ft. Owen-Sloan et al's Latimer 1, sd 930 ft. Roser-Pendleton, Inc.'s Sam Bateman 1, sd 710 ft. Sanger O. & R. Co.'s Ike Brown 1, fsh 1900 ft; Gillespie 1, dr 4480 ft. World Oil Co.'s J. R. Griffin 1, sd 1605 ft.

Upton County—Beatty et al's Lane 1, elev 2677 ft, top salt 880 ft, dr 2935 ft. Gulf Prod. Co.'s J. F. Lane 1, elev 2513 ft, top salt 475 ft, dr 1485 ft. Hults & Curtis' Gidding 1, sd 3615 ft. W. W. Donnelly & Marland's University 1, elev 2884 ft; top salt 1550 ft; sd 3290 ft. Marland Oil Co.s Levi Smith (University) 1, lcn. Simms Oil Co.'s B. C. Clark 1, elev 2469 ft, top salt 440 ft, top lime 1715 ft, flowing sulphur water 1835 ft. The Texas Co.'s Perry 1, rig.

Val Verde County—Douglas Oil Co.'s Sellars 1, fsh 2930 ft. Magnolia's W. E. Whitehead 1, spd and sd. S. A. McCaskey's Sellars 1, crooked hole 2600 ft. O. O. Owens et al's Mills 1, flowing sulphur water 2300-25 ft, sd 2400 ft. E. T. Williams et al's Holman-McNutt 1, dr 2845 ft.

Ward County — Marland Oil Co.'s Sealy 1, elev 2820 ft, top salt 1070 ft, dr 3285 ft.

Winkler County — Atlantic Oil Prod. Co.'s Hendricks 1, rig. Champlin Ref. Co. et al's Cowden-Means 1, elev 2889 ft, top salt 1705 ft, sr 2385 ft. Gulf Prod. Co.'s Hendricks 2,

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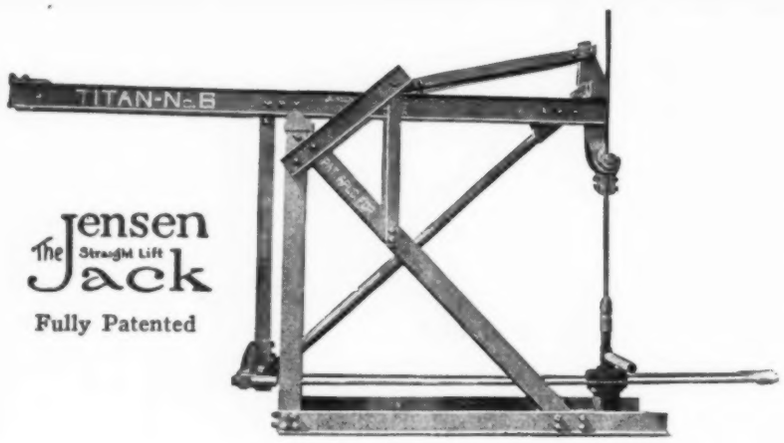

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3, 5 and 7, rigs; Hendricks 4, dr 325 ft; Hendricks 6, dr 370 ft. Hill et al's Ambrugey 1, elev 2995 ft, top salt 1220 ft, sd 3447 ft. Humble O. & R. Co.'s Hendricks 1, rig; Hendricks 1, Group 1, dr 535 ft. Independent O. & G. Co.'s Hendricks 1, elev 2825 ft, top salt 2375 ft, top lime 2720 ft, plugged back from water at 3095 ft to 3089 ft, flowing by heads 3049-89 ft; Hendricks 1-A, dr 215 ft; Hendricks 2-A, rig. Llano Oil Co.'s Scarborough 1, elev 2943 ft, top salt 1115 ft, showing oil and gas, dr 3060 ft. McCulloch Oil Co. & Marland's Tobe Morton 1, ur 8¼ in. cas 1980 ft. R. S. Matthews et al's Cowden 1-A, sd 200 ft. Pure Oil Co.'s Central State Bank Fee 1, top salt 1525 ft, dr 1550 ft; Central State Bank 2, rotary rig. Skelly Oil Co.'s M. M. Leeman 1, elev 2951 ft, top salt 1167 ft, set 5-in. cas 4015 ft. Southern Crude Oil Purchasing Co.'s Hendricks 2-C, elev 2824 ft, top salt 1901 ft, show gas in lime and anhydrite 2725 ft; Hendricks 3-C, elev 2816 ft, top salt 1870 ft, cmt 8¼ in. and std 2514 ft; Hendricks 4-C, rig; Hendricks 1-B, dr 2020 ft; Hendricks 1-F, lcn. Texon Oil & Land Co.'s Central Bank Fee 1, sd 130 ft. White Eagle O. & R. Co.'s R. A. Leck 1, dr 605 ft.

EAST TEXAS

Completions

Company, Well and Location	Initial Production Bbls.	Depth
Harrison County—		
A. R. Bahan, R. Abney 2, R. W. Bedford sur.	¶12	1925
Marion County—		
Moorfield et al, Stiles 1, N. Gupton sur.	100	2370
Panola—		
Magnolia's Ida Tiller 4, LeRoy Chrisholm sur	*	....
Houston—		
Porter et al, Austin 3	*	3470
Cherokee—		
Humble, Elliott-Clark 2	*	....

Anderson—Humble's Hasal (Southern Pine) 1, Posey, dr 3843 ft, packed sand; Clemens 1, Boggy Creek, dr 1954 ft, chalk.

Cherokee: Boggy Creek—Humble's Reynolds Mortgage Co. 1, dr 951 ft, sandy shale; Earle & Ragsdale 2, dr 2638 ft, sandy shale. Magnolia's Sumners 1, Ponta, prep to test oil sand, 4323-33 ft. Nichols et al's Hill 2, Alto, no report.

Freestone—Rosser Pet. Co.'s Woods 1, sd 4318 ft. Orbitt Oil Co.'s Colman 1, sd 3509 ft.

Houston—Porter et al's Austin 4, rigging up.

Tyler—Cheasman & Reynolds' Stone 1, sd 3240 ft.

Harrison—Sabine Drlg. & Dev. Co.'s Williams 1, Martha Duncan hrs, sd 2307 ft.

Panola—Magnolia's Lewis 3, dr 1994 ft.

Shelby—Arkansas Fuel Oil Co.'s Bouland 1, dr stem stuck 3724 ft. Clark & Melat's Pickering 1, plugging to abn 3250 ft. Magnolia's Pickering 1, sd 1879 ft.

Cass—The Texas Co.'s Glosson 1, lcn.

Bell County—Stanfield et al's Garrett 1, sd 925 ft.

Ellis County—Farrish-Watts-Collins et al's M. Rachel 1, Austin chalk at 780-1065 ft, water in Trinity sand 3368-3443 ft, dr 3510 ft.

Franklin County—L. E. Trout et al's O. W. Gandy 1, Austin chalk 1851-2111 ft, sd 3410 ft.

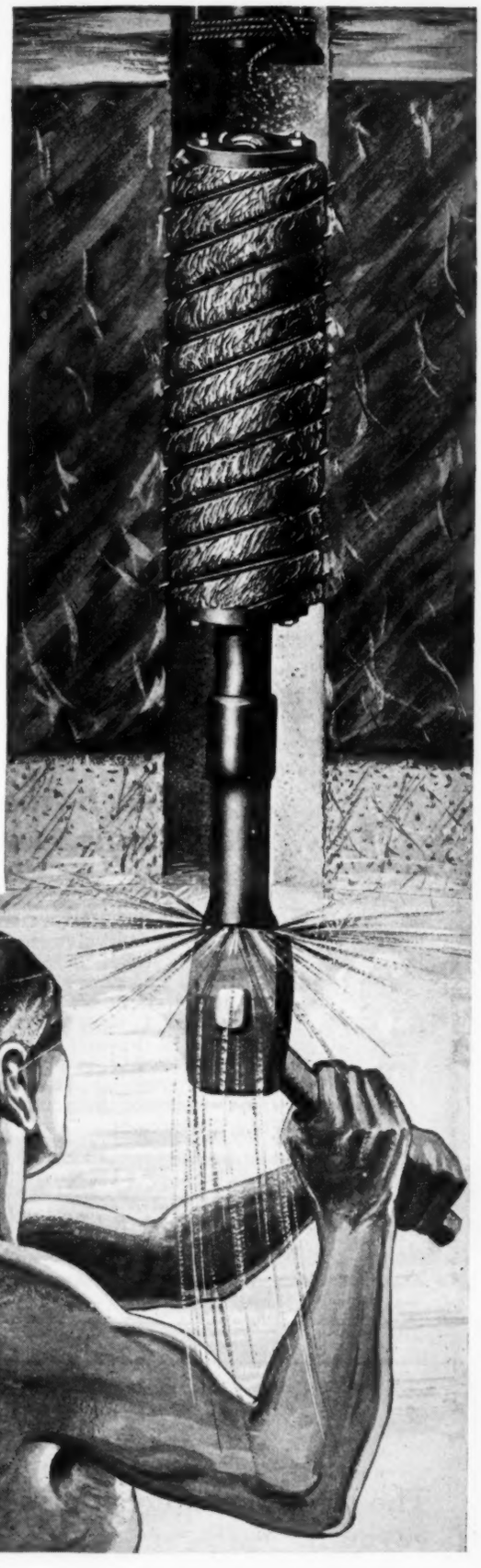
Freestone County—Alexander-Lyles & The Texas Co.'s W. L. Edwards 1, rig. J. S. Cosden et al's J. E. Woods 1, sd 4210 ft. Keechi Pet. Co.'s H. A. Pickens 1, cavey hole 4445 ft. Payne & Bons' (was Orbit Oil Co.) F. A. Coleman 1, Austin chalk at 2586-2998 ft, sd 3355 ft.

Henderson County—W. K. Clayton et al's Hoffer-Nash 1, Henry Jeffreys survey, lcn. Cranfill-Reynolds & Fred Haynes' R. E. Purefoy 1, top Austin chalk 2450 ft, dr 2700 ft. F. Heine & Humble O. & R. Co.'s Guy S. Perry 1, Mabank block, materials.

Hill County—Alexander-Lyles & The Texas Co.'s Chris. Knox 1, Austin chalk 777-1018 ft, dr 1240 ft. Riverland Oil Co.'s Humphries 1, Austin chalk 367-664 ft, sd 745 ft. Killum & Phillips' T. B. Findley 1, Austin chalk 800-1110 ft, dr 1210 ft.

Hunt County—Amerada Pet. Corp.'s Walter

Gas Pressure CAN'T BUDGE IT!



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Gas pressure can't budge the GUIBERSON Plug because, when it is collapsed, the steel spirals are expanded in diameter, forcing their edges into the walls of the well and securing a screw-like grip that never fails to hold.

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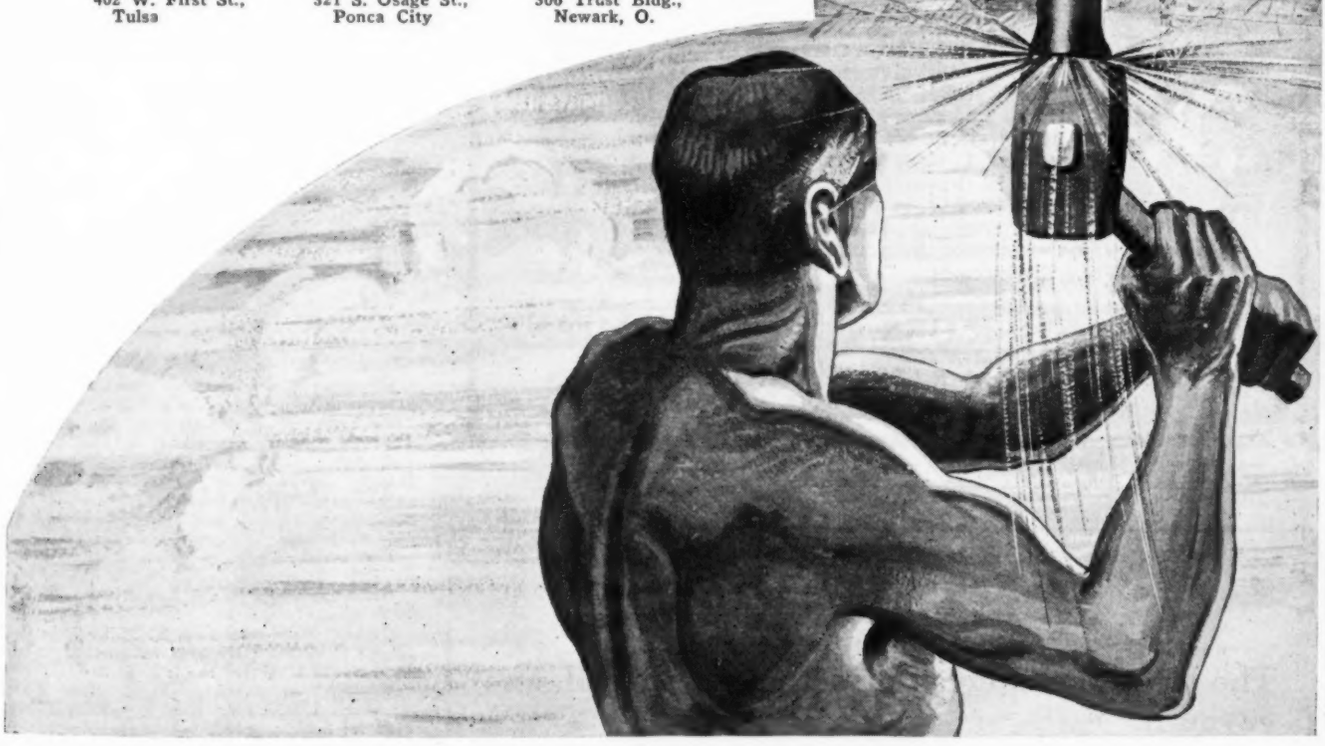

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Relieves Excessive Strain on Derrick Draw Works Blocks Wire Lines

Baash-Ross Drill Pipe Float

Placing the Baash-Ross Drill Pipe Float Valve in the string where it will give the required relief in weight, takes excessive strain off the derrick, draw works and wire lines. It closes the drill pipe so fluid in the well will not flow upward. The valve is opened by pump pressure and offers no resistance to circulation.

Write for circular.

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"ELBOF"

The electric geophysical method of subsoil surveying.

Locating, defining the areas and determining the depth of petroleum deposits.

ANDREWS & BORSUM

Esperson Building Houston, Texas

Granier 1, top Austin chalk 2140ft, dr chalk 2650 ft.

Kaufman County—Cranfill Bros. & Atlantic Oil Prod. Co.'s Nicholson-Mitchell 1, elevation 510 ft, top chalk 2330 ft, fsh drill pipe in chalk 2515 ft.

Limestone County—C. W. Green et al's A. M. Beal 1, elevation 445 ft, Austin chalk 2647-2914 ft, dr 3680 ft. B. & A. Drilling Co.'s (was Kosse Synd.) Jones 1, dr 915 ft. Jones et al's W. F. Batchelor 1, dr shale 2465 ft. E. L. Smith Oil Co. et al's Jake Steubenrauck 1, (Mexia Trinity sand test) elev 529 ft, Austin chalk 2727-2960 ft, sd for new drill pipe 5661 ft. Magnolia Pet. Co.'s J. R. Stroud 4-A, coring 3155 ft. Pandem Oil Corp.'s W. F. Bassett 1, elev 437 ft, Austin chalk 3125-3502 ft, cemented 6¼-inch pipe 4550 ft, bailed dry and standardized.

Navarro County—Magnolia Pet. Co.'s Corrie Marshall 1, near Rice, cleaned hole, dr 4140 ft. Sun Oil Co .et al's H. A. Swink 1-C, elev 422 ft, Austin chalk 2440-2880 ft, sd with 1100 ft drill pipe in hole, td 5415 ft. Byrd et al's Garrett 1, dk.

Robertson County—McMillen et al's Tideman 1, sd 2045 ft.

Upshur County—Magnolia Pet. Co.'s G. L. Cannon 1, dr 1985 ft.

TEXAS GULF COAST

Completions

Company, Well and Location	Initial Production Bbls.	Depth
Brazoria—		
Texas Co., Paddock 1	*	1004
Fort Bend—		
Gulf, Wolfe 2	*	973
Trone 2	*	1081
Hardin—		
Texas Co., Homestake Oil Co. 1	*	2150
Wharton—		
Texas Co., Felder 3	*	4630

Austin: Raccoon Bend—Humble's Bellville School 1, dr 3308 ft, streaks of oil in sandy shale; Reese 2, dr 2980 ft, shale and shell. Hickory Mound—R. E. Graves' Cleveland, sd 981 ft. Bellville—Mewis et al's Mewis 1, sd 1080 ft, gumbo. Kane et al's Knolle 1, set 6-inch cas inside 8-inch 550 ft.

Brazoria: Allen Dome—Roxana's Allen Bernard 1, bailing eight feet of oil sand 5131-39 ft. Clemens Dome—Roxana's Clemens 4, dr 4646 ft, shale; Pabst A-2, dr 5341 ft, shale and lime; Bell 1, dr 1672 ft, blue shale. Anchor—Staley et al's Glover 1, dr 1004 ft, blue gumbo. Stratton Ridge—Gulf's Perry 1, dr 3020 ft, hard sand. Associated's Seaburn 1, dr 4022 ft, gumbo and sand. Pure-Humphreys' Armstrong 1, dr 3738 ft, sand rock.

Fort Bend: Long Point—Gulf's Beard 4, dr 3176 ft, cap rock; Davis 25, lcn. Boling—Sun's Farmer 3, dr 1310 ft, sandy lime.

Goliad: Houston Oil Co.'s Pettus 3, sd 3586 ft, sand.

Harris: A. Smith Sur—P. S. Griffith's Fee 2, set 6⅝-inch 3330 ft. Hockley—Humble's Warren 1, dr 1966 ft, sand and shale.

Jefferson: Fannett—Gulf's Bordages 3, dr 5110 ft, shale and lime. Big Hill—Houston Oil Co.'s Fitzhugh 2, dr 2315 ft, sand. Spindle Top—Texas Co.'s Garrick 1, dr 4550 ft. sand and shale. J. O. Davis et al's Gladys 1, dr 5630 ft, gumbo.

Matagorda: Hawkinsville—Gulf's Craig 8, dr 4380 ft, hard shale and lime; Sanborn 3, dr 2803 ft, gumbo.

Montgomery: Spring—Brain et al's Fitch 1, dr 1900 ft, gumbo.

Nacogdoches—Steine & Lewis' Birdwell 1, dr 1080 ft, sandy shale.

Orange: **Gum Island**—J. T. Miller Drlg Co.'s Brown-Ocultree 1, dr 2200 ft, gumbo. Adams Bayou—W. C. Wells' Stark 2, dr 2280 ft, shale.

Washington: Brenham—C. A. De Ware's Lehmann 1, stuck dr stem in shale and bldrs 2708 ft; Schurenburg 1, (corrected depth) 1560 ft, gyp rock. Pratt-Hewitt's Konieczny 2, dr 2850 ft, sandy shale, trace of oil.

SOUTHERN CALIFORNIA

Completion

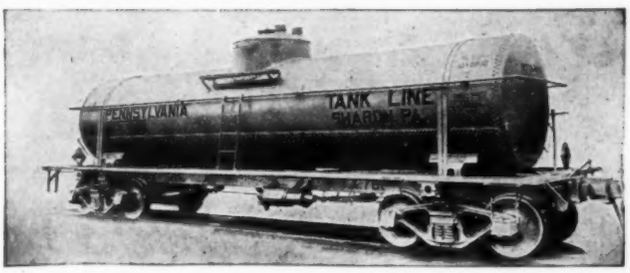
Hawthorne—		
Winwell Dome, test	*	5586

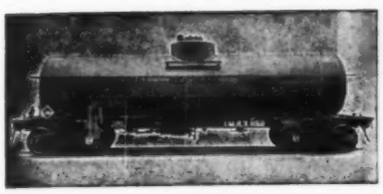
Boyle Heights—Haskell M. Green's P. A. S. F. 1, idle 1400 ft.

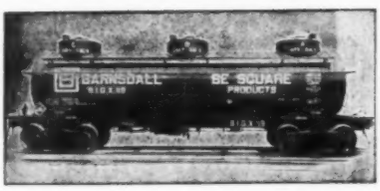
Claremont—Claremont Oil & Gas Co.'s 1, stg 1130 ft.

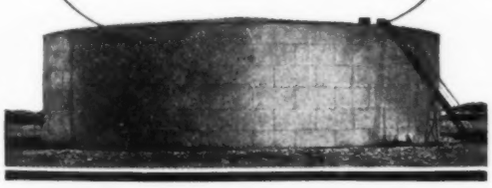
P.I.W. STEEL PLATE CONSTRUCTION

Now Builds the









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PIW shipping containers range from tank cars to 15-gallon drums; PIW storage tanks are built to hold up to 120,000 barrels; the Steel Plate Department produces stills, agitators, and steel plate equipment of all kinds.

Mass buying power, enormous manufacturing facilities, and an organization geared up to give rapid-fire volume production at short notice combine to give unusual service to the oil industry.

P.I.W. Service is World Wide

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NEW YORK CHICAGO SHARON, PA. HOUSTON TULSA

The Improved EDWARDS "CUT and PULL" Casing Cutter

—The original tool accomplishing both operations at one trip.

—Spear can be released and cuts made above or below first cut, on one trip into the hole.

—Has wash-down and diamond point features.

—Unnecessary to run mill ahead of tool.

Patents Pending
Very Broad

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California
E. C. SAUL,
Monadnock Bldg., San Francisco, California

Coyote-West—Bastanchury Ranch Co.'s 1, dr 5020 ft.

Davidson City—California Well Drilling Co.'s test, dr 5620 ft.

Dominguez—Dominguez Extension Oil Co.'s 1, re-cmt 5510 ft.

Eagle Rock—Calwin Oil Co.'s 1, pulling cas. 6138 ft.

Gardena—Circle Oil & Gas Co.'s Pomeroy 1, fsh. 4130 ft.

Julian City—J. E. O'Donnell's 1, rigging rotary.

Maywood—Magnolia Pet. Synd.'s 1, idle 4452 ft.

Newhall-Saugus—Geo. W. Johnson's Wickham 1, idle 2840 ft. W. W. Stabler's Castaic 1, idle 3408 ft. Temple-Lefevre's Castaic 1, idle 2107 ft.

Olive—Standard Oil Co.'s Geiser-Brelja 1, loc.

Palos Verdes—Petroleum Securities' Weston 1, dr 2770 ft.

Placentia—Shell Co. of Cal.'s Allec 1, building rig.

Potrero—Associated Oil Co.'s Cypress 1, stg 4450 ft; Johnson 1, rigging rotary. California-Eastern Co.'s Cypress 1, dr 3670 ft.

Rivera—Geo. F. Getty's Tubbs 1, dr 890 ft.

San Fernando—Shell Co. of Cal.'s Mission 1, building rig.

San Jose Hills—Bardeen Oil Co.'s Didier 3, dr 2190 ft. D. & B. Oil Co.'s Amar 1, dr 3890 ft.

San Juan Capistrano—O. K. Carr's No. 2, rigging up. Norswing-Halbertson's Spitz 1, stg 4060 ft.

Sunset Beach—General Pet. Corp.'s Lomita 1, dr 5332 ft.

Telegraph Canyon—Quadra Pet. Co.'s MJM 1, stg 4210 ft.

Riverside Co.—Corona Oil & Gas Co.'s 1, idle 1550 ft. Four Drillers' 1, rig. Spindletop Oil Synd.'s test, idle 2650 ft. Trabuco 1, dr 2136 ft.

San Diego Co.—Cardiff Oil Corp.'s 1, testing 2805 ft. Southern Oil & Gas Co.'s 1, dr 1840 ft.

San Bernardino Co.—Burgess-Goodale-Riggins' 1, idle 4110 ft. Colton Terrace Oil Co.'s 1, idle 1320 ft. Como Oil Co.'s Cajon 1, dr 1420 ft. H. & P. Oil Co.'s 1, pulling cas 2130 ft.

Standard Finds Edge of Inglewood Production

Inglewood, Calif.—Part of the southern edge of the Inglewood oil field seems to have been determined by showings recently made in the Standard Oil Company of California's Stocker 11. Standard is preparing to abandon this project, after failing to encounter any positive showing down to as deep as 2825 feet.

Stocker 2, which is located only one location north of the well scheduled for abandonment, is a producer.

Standard of California Starts Wildcat

Los Angeles.—Standard Oil Company of California soon will spud in on a wildcat well in the Palms Beverly area, north of Culver City, according to reports.

The wildcat well, to be known as Marblehead 1, is located on a 300-acre lease secured from the Marblehead Land Company and by the Standard Oil Company.

While former drilling in the neighborhood has been limited and negative in results, the tests made in the vicinity are not considered conclusive. The Standard is working on the assumption that other drilling was done off the structure.

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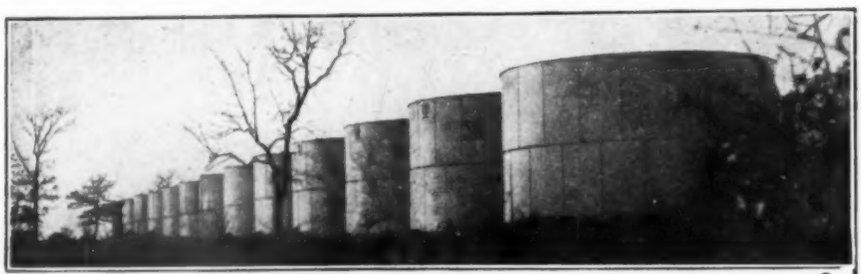

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Howell Aluminum "3 in 1" Vacuum Pressure Valve and Thief Hatch—The BEST and LATEST Deck Equipment—POSITIVE Safety

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Sizes 12 to 3,000 Bbls.

Packed in Steel-Bound Crates for Export

MADE OF KEYSTONE COPPER STEEL

MALONEY

What Does an Oil Scout Do—and What For?

(Continued from page 54)

edge he may possess on geology or production methods, nor is it considered good practice to indulge in any such sartorial display as, for instance, wearing "Hollywood rompers." There was once a very good fellow who was otherwise gifted with many of the characteristics that go to make up a scout, but unknowingly held himself up to ridicule by scouting among drillers in a pair of pink golf pants. When the fallacy of this practice was called to his attention he was very much surprised, but had the good sense to see the wisdom of the idea. He has since become a valuable man and now wears them where they are more effective.

In contrast to the experience of this scout is that of another who secured much valuable information by calling on a man while in golf togs. The conversation developed that the operator was a golf bug, and thereby a golfing acquaintance sprang up which was very helpful.

All of which goes to show it is not the clothes that make the man, but they may unmake him in the eyes of the individual with whom he is dealing, and that he must be versatile and use the makeup suited to the occasion.

Sometimes a scout runs up against the self-contained or bumptious official who, after repeated treatment, fails to yield. In this case he may try giving him the "turnover" as the salesman does; he may sick another scout friend on him. He shouldn't get sore, as some men have in cases like this, and retort, "Well, sir, I've been kicked out of nicer offices than yours;" or, "Well, maybe my company will be able to worry along without your dope." He should save the sarcastic wit; it doesn't pay.

Handling Hardshells

A scout should never allow himself to be discouraged by anyone telling him, as they often do, that there is no use to call on this or that individual; that he wouldn't be able to get any information. It is often the case that the very man with a reputation of being a "hard shell" and a scout hater, is very often, when correctly approached, easy of access.

This point might be very well illustrated by the following story:

A man who had a reputation of being very fascinating to the ladies was questioned upon his success by a friend.

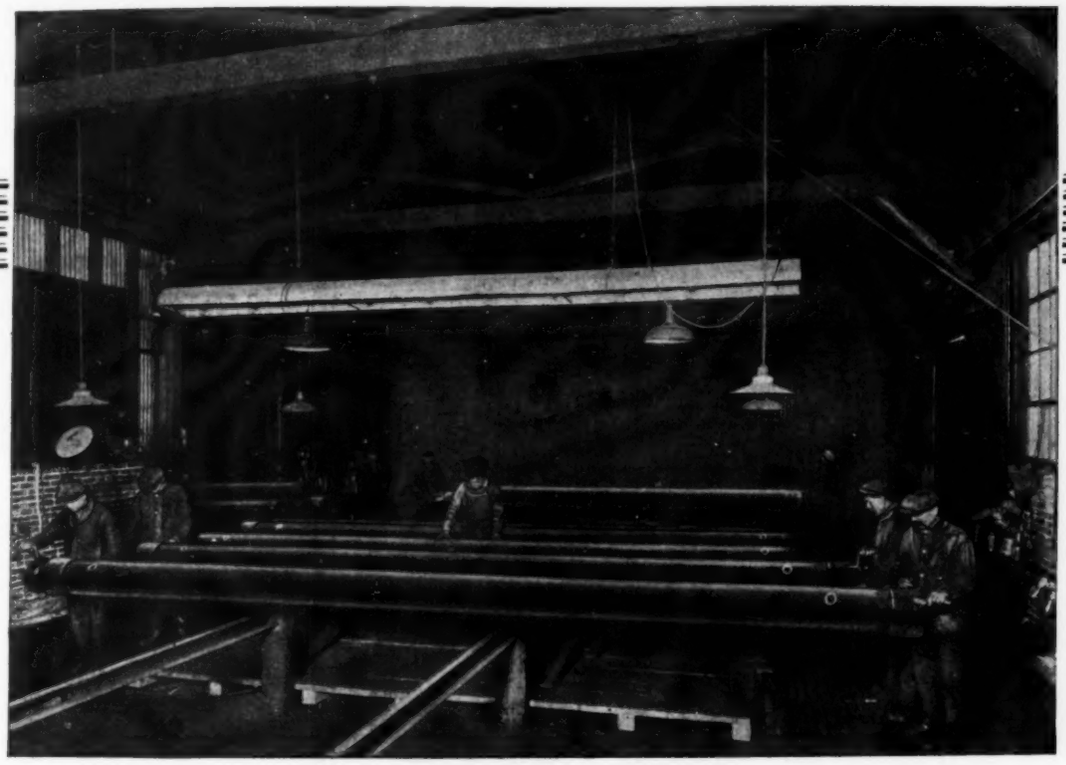
The friend said to him, "They say you try to kiss every pretty girl that you meet."

He replied, "Yes, I guess that's about true."

The friend retorted, "You must get a lot of slaps."

"Yes," he said, "I do; but I get a lot of kisses, too."

The value of co-operation between



Not till the inspection is completed and satisfactory does the inspector put his O. K. in the White Circle.

Inspection in the Shops Heads Off Trouble In the Field

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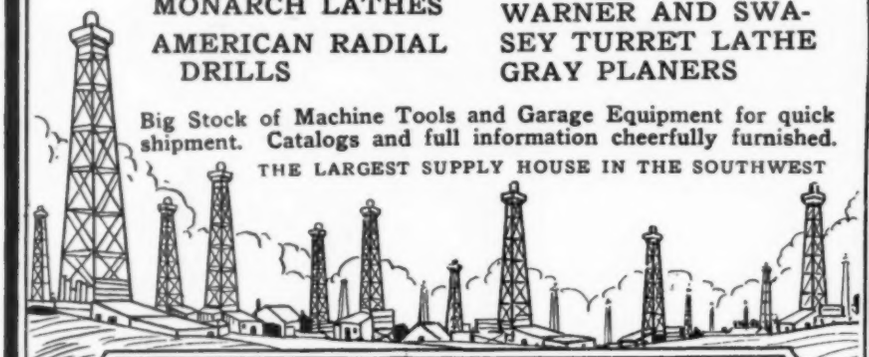

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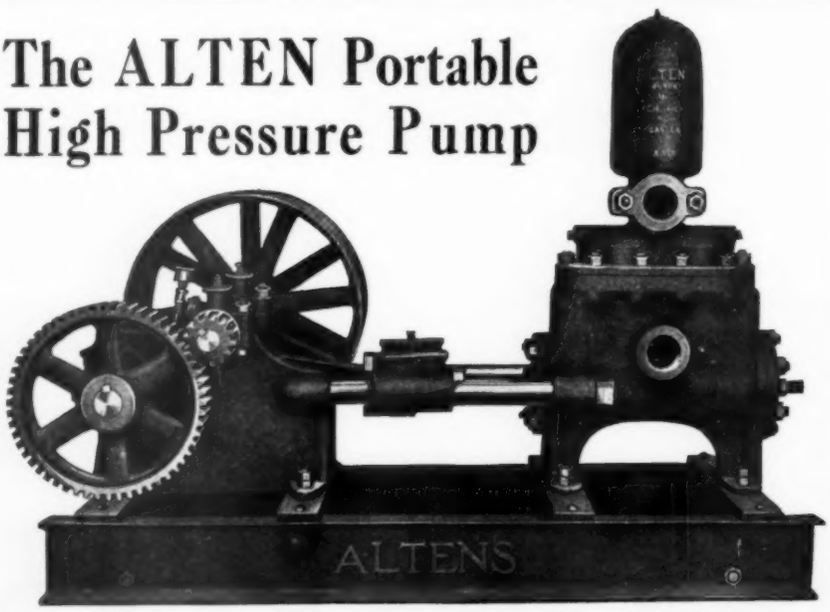

Mounted on a base of channel steel with tight and loose pulley. Can be driven by belt from any available power. Equipped with interchangeable pistons and cylinder liners for various capacities.

Ask your supply house or write us.

Alten's Foundry & Machine Works

Established 1889. LANCASTER, Ohio.

scouts and oil operators cannot be over-estimated. Not so many years ago oil men, to a large degree, attempted to go it alone, but in the past five or six years the system of scout conferences and a regular exchange of information between many of the larger companies has gone a long way towards cementing the relation betwen companies for their mutual welfare.

Although there exists a pretty close association among oil scouts, amounting almost to a fraternity, still there is considerable friendly rivalry between them. Secrets are closely guarded, and information that would put their own company ahead of others in competition is not often communicated even to close friends; which is as it should be.

There is, of course, considerable information in the oil business that is legitimate property of operators holding it. This is mainly information as to wildcat wells, which if it became too public could easily work to the disadvantage of the company concerned. There are also trade secrets which are very properly withheld from competitors. On the other hand, there is a large amount of information as to drilling and production methods which may well be disseminated among neighbors for the good of all concerned. There are still many operators of the old school of thought who are "die-hards" on this question of co-operation, but time and the spread of the more modern idea is gradually weeding them out.

Every experienced scout knows that the backbone of his work is exchange of information, and although the other fellow may not have very much to trade him because he is a new operator in the field, he never knows when the shoe will be on the other foot and the other man has the preponderance of dope.

There are numerous instances in which companies have started out in a small way, with one scout with his headquarters where he hung his hat, who ran himself ragged gathering data here and there, and was not admitted to conference with those who sat in the seats of the mighty, but whose company in a short time developed into the big production class; conditions were reversed and the once lowly scout "sat in the golden chair."

So a good maxim is, "Treat the tenderfoot right; you never known when he will pair his hole card."

In conclusion it might be well to emphasize one important essential as pointed out to his scouts by one of California's well known oil men, who though not temporarily fitted himself for scouting, nevertheless had a canny visualization that enabled him to direct scouting to focal points. His repeated instructions were:

"When you go after the dope, learn to look for important details. Use your eyes and ears and get it all."

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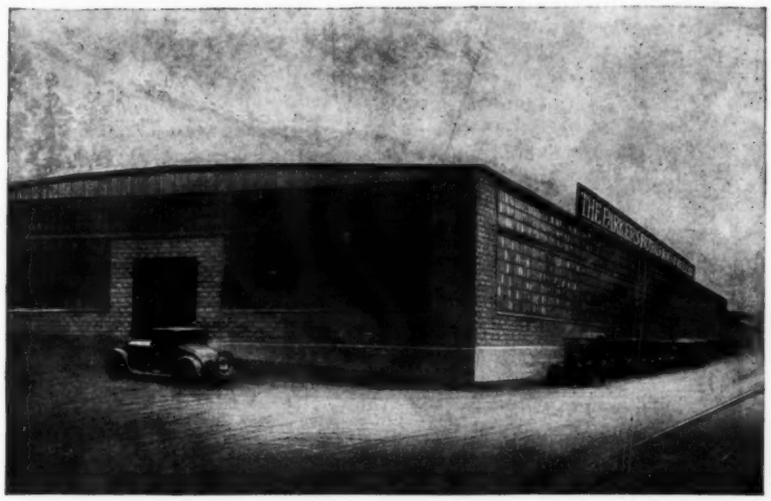


Where Quality Begins

THIS modern, daylight foundry, the largest in the world devoted exclusively to the casting of rig irons, is where the quality of Parkersburg Rig Irons begins.

From the selection and purchase of raw materials through the manufacture of the finished product, Parkersburg's rigid standards of quality must be strictly adhered to.

This explains the remarkable service record of Parkersburg Rig Irons in every field — explains their world-wide acceptance and the economy and satisfaction that they are giving to users everywhere.

The complete Parkersburg line includes Common, California and A.P.I. Standard Rig Irons.

The Parkersburg RIG & REEL COMPANY

Main Office and Works, Parkersburg, W. Va.

Sales Offices and Stocks Carried in Every Producing Field

Viking Twin Oil Pumping Units

Figure—15

FOR UNLOADING AND TRANSFER SERVICE

No. 2 Twin Outfit complete with 3 H. P. Gasoline Engine.

Capacity each pump 90 Gallons per minute.

Manufactured by

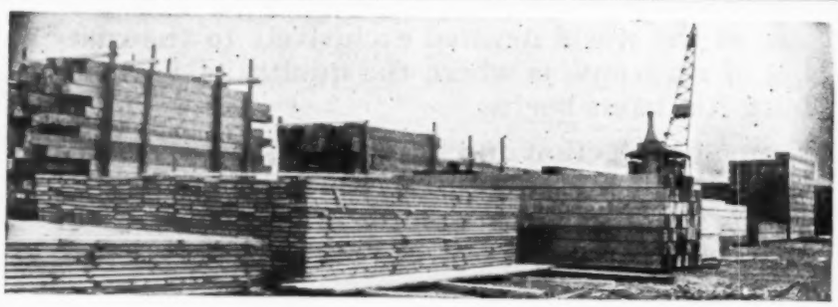
VIKING PUMP CO.

Cedar Falls, Iowa

Sold By

Southern Engine & Pump Company

HOUSTON, TEXAS



We Have Increased Our Facilities

to serve the oil trade. Our new Oregon Fir Concentration yard in Houston is stocked with Fir LUMBER and Fir TIMBERS brought via Panama Canal.

This enables us to load up to five cars per day of rigs, derricks, foundations, large structural TIMBERS for both cable tool and rotary work. Also we can make combination shipments of Pine and Fir.

We have installed this new Department to SAVE YOU MONEY and IMPROVE OUR SERVICE in straight or mixed cars.

Robertson-MacDonald Lumber Co.

General Offices 1507-08-09 Esperson Bldg. New Offices
HOUSTON, TEXAS.

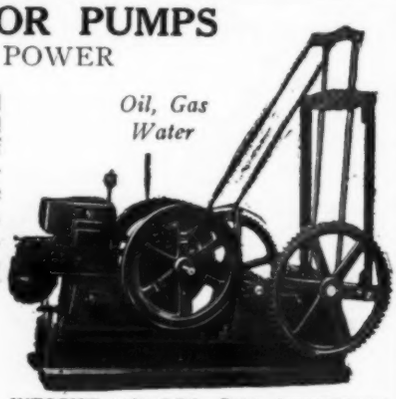
SCM

RELIABLE JUNIOR PUMPS

SINGLE WELL POWER

A COMBINED engine and power for pumping well of 2000 ft. or two wells of 1000 ft. Gas or gasoline; detachable jack-head enables rods to be pulled without moving power. Most economical and efficient. Price with cut gears, $270.00 f. o. b. Parkersburg, W. Va. Write for catalog.

Oil, Gas Water



THE SPENCE MACHINE CO.
PARKERSBURG, W. VA.

WEIGHT 1400 LBS. FOR SHIPMENT

"Let's Check" Opens Information Exchange at Seminole

(Continued from page 56)

operative efforts came the first and only survey of the air-gas lift installations ever prepared in Oklahoma, dealing with the Seminole area—and probably this survey presented the facts regarding air and gas lift more comprehensively than anything previously prepared—for the application of air-gas lift methods at Seminole are more extensive than in any other field developed to date. The scouts could find their men—"lift engineers," and did—with the result that their aggregate "dope" prepared in table form gave access to some highly interesting and important information relative the status of "lift" methods, and its successful application in this territory.

Pipe line situations in the form of resumes and surveys of the Seminole area are seen in the making at the check session of the scouts. Tanks, tank farms, the state of development of all the tank construction work in the field, whether grading for foundation, bottoms in, one ring, three rings, etc.—all of the details of tank storage construction comes from the scouts, whose eyes, it seems, miss nothing. From such contributions comes the knowledge of steel storage conditions in the field, how much storage there is at present, and what the storage capacity for the area in the next 30 and 60 days will be—all such information valuable at present, and governing the action of future construction of steel storage is accurately reported by the all seeing scout each day.

From such reports as the scouts prepare and submit to their respective companies comes the bulk of all of the important information upon which the industry depends for its future guidance. The statistics of the producing industry, cumulative, accurate, and up-to-date, are traceable to the activities of the scouting departments. In fact, all of that vital, important and ponderable mass of information and statistics which governs the actions and reactions of the petroleum industry is derived, in the greater part, from the tireless, energetic, unceasing activities of the industry's scouts.

Co-Operative Effort

In the Seminole area the scouts have banded together for the purpose of securing the "dope" required, and interchanging this information among themselves at their daily and weekly check sessions. In the daily meeting, each scout arrives from his early morning drive, over his allotted territory ready with the details of the developments in

the *Spiral Stripe*
protects you against mistakes and substitution
Also look for name and year rolled in metal

A.P.I. Specification TUBING

Byers tubing, both plain and upset, in all sizes, is now furnished to A. P. I. Specifications. This includes the specified dimension for pipe as well as couplings and threads. The advantages of A. P. I. specification tubing are too well recognized to need further comment here.

Make This Test

Before you buy tubing again, consider the corrosive conditions prevailing in the locations where it is likely to be used. If ordinary tubing does not give the desired life in service, try a few strings of Byers—made of genuine old-fashioned wrought iron, long recognized for its superior rust resistance. Then compare its life with that of cheaper tubing. Let the service records decide the issue! It will mean substantial savings to you, for you will find the extra life of Byers pipe compensates you many times over for its extra first cost.

DISTRIBUTORS:
Jarecki Mfg. Co.
Oil Well Supply Co.
Norvell-Wilder Hardware Co.

A. M. Byers Company
Established 1864 Pittsburgh, Pa.

BYERS PIPE

GENUINE WROUGHT IRON

Say you saw it in The OIL WEEKLY

BUY USED PIPE

And Save the Difference

75,000 ft. 2" used line pipe		15,000 ft. 5-3/16" used casing	
75,000 ft. 3" used line pipe		15,000 ft. 6-5/8" used casing	
30,000 ft. 4" used line pipe		5,000 ft. 8-1/4" used casing	
20,000 ft. 6" used line pipe		5,000 ft. 10" used casing	
10,000 ft. 8" used line pipe		1,000 ft. 12½" used casing	

Three complete strings Standard Drilling Tools.
150 tons 60 lb. No. 1 relaying rails.

We buy abandoned pipe lines and oil wells. If you have any to sell, communicate with us before you dispose of them.

BRANCH STORES
Wichita Falls, Holliday, Vernon, Breckenridge, Texas
Eastern Headquarters
Butler, Penna.

Keystone Pipe & Supply Co.

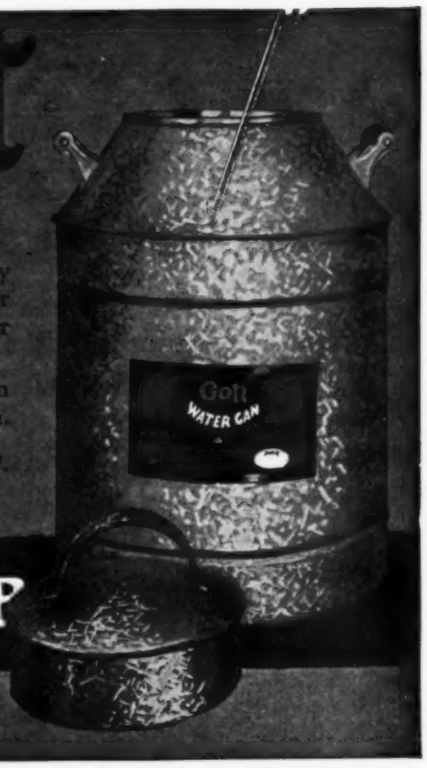
HOLMES BUILDING
FORT WORTH, TEXAS

Gott
Water Can

Clean-pure sparkling water ready to drink at all times. No matter where you are, the GOTT Water Can is health insurance.

Comes in 1½, 3, 5 and 10 gallon sizes. Your supply store has them.

H. P. GOTT MFG. CO.
WINFIELD, KANSAS



PURE WATER

Simplex —

the jacks that demonstrate the maximum of power, safety, stability and simplicity.
Templeton, Kenly & Co., Ltd. Chicago

Simplex Jacks are stocked and sold by leading supply houses in every oil field.
Send for descriptive literature.

his area. Each scout has a certain definite portion of the fields to cover. Nowadays, the securing of the information when the scout arrives on the scene is not so difficult a task as it was some years ago. Company policies have undergone a change. The scout is recognized for his true value, and the information he requires is usually freely given. Perhaps one or more operators in a large field like Seminole may still cling to the old fashioned attitude of secrecy of their operations—but when such a condition faces the scout his early training and present determination usually opens a way for him to secure the necessary "dope." And many and devious are the ways of a good oil scout. His job is to get it—and he sticks to the job.

The important obstacle which the touring scout must overcome at Seminole is roads—or the absence of them. Either dust or mud, from one extreme to the other, is the scout's worst enemy. That, coupled with the bottomless-ness of roads when wet, and the depth of holes and ruggedness of surface and the opaqueness of the ever-present dust cloud, when the roads are dry.

Another consideration which tends to make the work of the scout more interesting, in connection with the condition of the highways, is the traffic on these roads. Beginning his rounds early in the morning, both for the purpose of visiting his many sources of information and to avoid the congestion concurrent with the transportation of equipment, in order that he may arrive at the appointed hour at the check meeting, the scout is confronted with the problem of maneuvering his machine in, around and among all sorts of vehicles, and at all times. Where possible he stays in the so-called side roads, avoiding the main thoroughfares—but running the risk here of the worst type of roads and the deepest of mud or "chuck" holes.

The oil scout is the pioneer of new districts and communities all welcome his arrival, for he is the vanguard of the producing industry. The scout is the first to enter the prospective oil territory and he is usually the last to leave, for he stays to watch and to report just so long as there is anything of interest in the district.

Rivalry Lacking

The past few years have seen a marked change in the accounting methods of the oil companies as a whole. No longer is the bitter rivalry evidenced among the companies which once was the supposed keyword to success, and which was the direct cause for the oil man's inherent attitude of secrecy in his operations. Once forbidden to fraternize with their brothers or to exchange confidences, the scouts are now encouraged to effect this interchange, and the scouts of the oil companies are now banded together into one of the strongest organizations of the industry, which in this section is

Safe!

Ask any TRU-LAY user

Throughout several years of hard field lines, rotary drilling lines and coarse service, Tru-Lay Brand Preformed laid cable tool lines, Tru-lay Brand Wire Rope, due to its exclusive pre-will give you longer and more eco- formed construction, has conclusivelynomical service—more dollar for dollar demonstrated an added factor of safety. value. Prove this on the next job. Installed as sucker rod lines, tubing

AMERICAN CABLE COMPANY, Inc.
105 Hudson Street, New York City
District Offices: Chicago, Cleveland, Philadelphia, Pittsburgh, Tulsa
The Dominion Wire Rope Company, Limited, Montreal, Sole Canadian Licensed Manufacturers

SOLD IN FIELD STORES BY:
Jarecki Manufacturing Co. and Branches, Pittsburgh, Pa.
Jarecki Manufacturing Co. and Branches, St. Louis, Mo.
Marion Machine and Foundry Co. and Branches, Marion, Ind.
Fort Worth Well and Machinery Co., Fort Worth, Texas
Grinnell Company of the Pacific and Branches, Los Angeles, Calif.

PREFORMED WIRE ROPE
TRADE TRU-LAY MARK
[REG. U. S. PAT. OFF.]

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CONSULTING GEOLOGIST
ADVISOR ON GEOPHYSICAL INSTRUMENTS
619 Petroleum Bldg., Houston, Texas

THE FT. WORTH LABORATORIES

Field Gas Testing. Analysis of oil field brines, gas minerals and oil Soil Thermometers, Hydrometers and Laboratory Glassware
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Specializing in Oil Law and Land Law

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Formerly Assistant Examiner United States Patent Office
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Tret-O-Lite for treating "CUT OIL"

is by far the most widely used process. 100% thorough, recovering *all* the oil. Lowest in equipment cost. Lowest in operating cost per barrel recovered. Simplest and most rapid of all methods. Our field engineers available for consultation without obligation.

Process Patented

WM. S. BARNICKEL & COMPANY
St. Louis, Mo.

Tret-O-lite
Reg. U. S. Pat. Off.

known as the Mid-Continent Scouts Association. No longer does a single scout have to cover an immense territory, but those who are active in any one large district, divide their territory into routes or sections, and with each covering a small portion of the whole, they are enabled to exchange the details of the development of all sections —much to the benefit of both the scouts themselves and the companies by whom they are employed.

Fortunately the scout, inquisitive by virtue of necessity, no longer must hide at night beneath the derrick floor, and count pipe, wireline or cables, or resort to other schemes for securing information, too numerous and devious to mention—for the producing industry has learned the value of co-operative effort, and with the exception of a very few instances, the scout is as welcome on the derrick floor as he is in his own hotel. Occasionally the scout finds an obstacle in his way, and if his own repeated efforts are unavailing, he calls upon his brothers—and with the invariable result that the scouts "get it," and the dope goes quickly to headquarters offices. At the morning session at Seminole, regardless of rain, snow, ice, mud, dust or "chuck" holes—each scout is present, and in his loose leaf book he possesses the required information covering developments in his particular district. As they congregate, they swap a few experiences, they pound each other's back, and they expound at great length upon the conditions and developments, humorous or serious, having to do with their work and life, their dogs, their cars, their pipe line flows, their tank storage—and how many fish they're going to catch when the next vacation rolls around, until the "czar" (elective in this organization), calls time with the words "Let's Check"—then the business of the day is commenced.

Within a few hours after the utterance of these words, "Let's Check," the headquarters offices of all the companies represented in the field have received reports, fully itemized and detailed—inclusive of all of the vital, accurate and important information having to do with the late developments of the entire Seminole producing area.

Athens - Rosecrans Test Shows Wet

Los Angeles, Calif.—After swabbing at 6500 feet, Trust 4, deep test of the Union Oil Company in Athens-Rosecrans field, turned out wet.

According to field reports, the well will be plugged back and tested again. The present production test yielded a small amount of oil and a considerable amount of salt water.

FOR SALE
Twenty-five 1,000-bbl. Butler and Columbian Bolted Steel Tanks. Good Condition. Located 18 miles east of Duncan, Oklahoma. Address Box 383, Duncan, Okla., for prices.

TEXAS OIL MAPS
County and District Catalog on Application
HEYDRICK MAPPING COMPANY
Wichita Falls, Texas

EDWIN B. HOPKINS
CONSULTING GEOLOGIST
25 Broadway
NEW YORK

PHILLIP MAVERICK
PETROLEUM GEOLOGIST
Telephone 93
Ricker & Dodson Bldg.
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ORIGINAL EOTVOS TORSION BALANCES
Sold and your personnel trained, or rented by the month or by the acre.
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Mr. Ferd Krueger in Charge
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Amarillo's
Two Great Hotels
Amarillo Hotel

400 rooms—300 baths
Now Open—Rates $2.50 Up

Herring Hotel
600 rooms—600 baths
Open Jan. 1, 1927—Rates $2.50 Up
Address communications to Ernest O. Thompson, Amarillo, Texas, President of both hotels

DARLING

announces a New

FORGED STEEL

DRILLING GATE VALVE

Watch for full details in an early issue

DARLING VALVE & M'F'G CO.
WILLIAMSPORT, PA.

Battery of 100 *H. P. Waukesha Oil Field Units at Tonkawa, Okla.*

p-721-L

$10.00 a Minute

That's what it costs in production loss if this plant is shut down. Continuously, night and day, these Waukesha "Ricardo Head" Oil Field Power Units toil delivering gas at 250 pounds pressure from two-stage 10x4½x10 gas compressors that they drive. What better proof of Waukesha stamina and reliability could you ask?

Waukesha "Oil Field Power Units" have contributed very greatly to the successful flowing of oil in the seminole field where more than a unit a day went into the field during the boom. Waukesha Units are also built for pumping oil and water and drilling wells, either with cable or rotary rigs. Write for further information if you are interested.

P-731-L

OIL INDUSTRY EQUIPMENT DIVISION

WAUKESHA MOTOR COMPANY

Waukesha Wisconsin

New York	Kansas City	Denver	Tulsa	Houston	San Francisco
8 W. 40th St.	V. L. Phillips Co.	Wilson Machy. Co.	C. F. Camp Co.	Portable Rotary Rig Co.	C. A. Watts

Exclusive Builders of Heavy Duty Gasoline Engines for Over Twenty Years

NEW EQUIPMENT, CATALOGS, BULLETINS, BOOKS

New Pumping Outfit is Efficient

The Allis-Chalmers Texrope Driven Oil Well Pumping Unit, developed and put on the market recently by the Allis-Chalmers Manufacturing Company, Milwaukee, Wisconsin, is commanding much attention from operators. A number of these units have been installed in the Panhandle district and have given excellent results.

The outfit inculdes the following equipment: a cast iron base plate for mounting the motor and the speed reducer, an Allis-Chalmers two-speed slip ring oil well motor with slide rails, a suitable control apparatus for the motor, a Falk Herringbone gear speed reducer with extended shaft and bearing pedestal, a Texrope drive consisting of two grooved sheaves and six "V" type endless belts, a crank arm to which the pitman rod is attached, and a split sprocket for hoist work.

The entire outfit is shipped completely set up and mounted on its own base. To install the unit, it is set on its foundation, the pitman rod is connected to the crank, the control is connected, and everything is ready for operation.

It is claimed by the manufacturer that an average of 96 per cent efficiency can be expected from the outfit, from motor to crank.

Salvage value of the outfit is high, as it can be picked up and moved from well to well with minimum expense.

The highest gear speed obtained is not over 400 feet per minute.

Lubrications of both gears and bearings is automatic.

The Falk Herringbone steel gears in the speed reducer are on shafts mounted in bronze bearing shells.

The two speed slip ring oil well motor with Timken tapered roller bearings, drives the speed reducer through the flexible Texrope drive.

On one end of the low speed shaft of the reducer is mounted the crank which is direct connected to the pitman. A pedestal bearing supports the extended end of the crank shaft. The hoisting sprocket conforms to A. P. I. standards.

For changing the speed ratio of the unit to increase or decrease the number of strokes, extra motor sheaves can be furnished. A short time is required to change the ratio.

The control apparatus is mounted on an angle-iron frame and consists of a pole-changing drum which is used to change the primary connections of the motor from low to high or from high to low H. P. as desired. The main drum controller is mounted above to the left and consists of a specially designed drum which takes care of the reversing and the speed changes. There are six speeds obtainable on low H. P. and six on high H. P.

It is claimed that the Texrope drive has sufficient flexibility to absorb the extreme load changes and shocks always encountered in oil well pumping.

Additional information may be obtained from the company on request.

Paul Abron Opens Sales Office

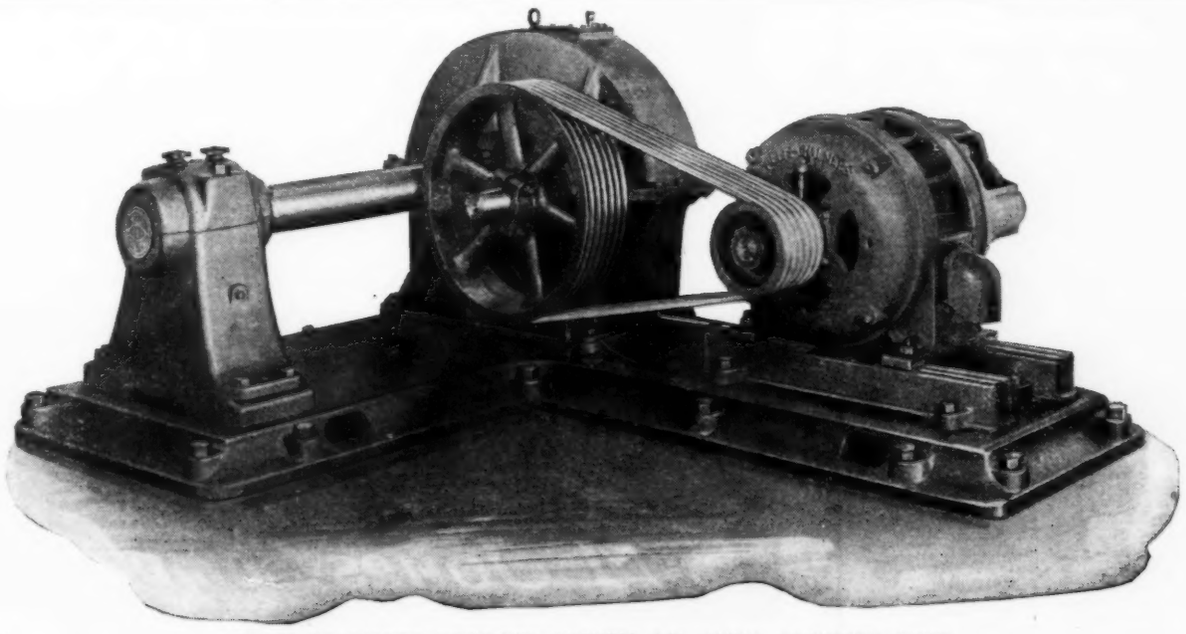
Tulsa, Okla.—Paul Abron & Company of Tulsa, manufacturers of oil well tools, have recently opened sales offices at 708 Petroleum Building here. J. R. Certain is sales manager in charge.

Sales - Service Company New in Tulsa

Tulsa. — The Mid-Continent Sales-Service Company has been organized in Tulsa and will represent manufacturers of non-competing lines in the Mid-Continent field. H. N. Gardner is president of the company and Fred J. Nold secretary and treasurer. Both are of Tulsa, Mr. Gardner having been associated with the Oil Well Supply Company for many years as credit manager, and Mr. Nold was with the Pure Oil Company, and later associated with the National Supply Companies. Both men are experienced in the supply business and enjoy a wide acquaintance in this field.

The company offers to the manufacturers they represent a complete warehouse service including unloading, storage, shipping, telephone listing and other service usually performed by a branch office or store. They also will co-operate with the sales representatives in the field of manufactured products.

The company has commodious warehouse space and are equipped with modern facilities for speedily handling shipments of all kinds out of Tulsa stock.



ALLIS-CHALMERS TEXROPE DRIVEN OIL WELL PUMPING UNIT

Foreign Countries Demand It

The fame of the improved Adams Combination Cuff and Standing Valve has extended overseas. Old-fashioned leathers eliminated, easier to install, longer life.

WRITE FOR PRICES

SOUTHERN BRASS MFG. & PLATING COMPANY

6614 Harrisburg Blvd., Houston, Texas

Always the Same Dependable Quality—

Diamond "H" Bit and Jar Steel—made from the highest grade acid open hearth ingots for oil well drilling tools.

HEPPENSTALL
FORGE AND KNIFE CO.
PITTSBURGH, PA.

BRANCH OFFICES:

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St. Louis, Mo.
Milwaukee, Wis.
Los Angeles, Calif.
Fort Worth, Texas
San Francisco, Calif.
Denver, Colo.

Foam Generator Aids Fire Fighting

The most recent addition of the Foamite-Childs Corporation to its line of fire fighting equipment, is a portable foam generator. Various tests with the generator have shown it to be very effective for putting out oil fires.

Through the use of the generator a stream of fire-smothering Firefoam is created by introducing a dry chemical compound into a stream of water.

The generator consists of a hopper into which the powder is poured at time of fire and is automatically drawn into the body of the generator by the suction produced by water which passes through the generator at a predetermined rate of flow for a given pressure.

Inlet and outlet connections for suction and discharge hose are provided and also a special shut-off valve for controlling the water supply to the generator.

Further information will be supplied by the company on request.

THE FOAMITE FOAM GENERATOR

Axelson Opens Export Office in New York

New York.—Axelson Machine Company, prominent manufacturer of oil field equipment with headquarters in Los Angeles, has recently opened an export office here, in charge of A. A. Dill.

The office is located at 30 Church street, and comprises a suite of rooms on the 15th floor.

Assisting Mr. Dill will be a staff of foreign field service engineers. T. T. Ward, who has been the New York representative of Axelson for several years, will continue to be affiliated with the company in an advisory capacity.

Mr. Dill has previously been located at the home office in California.

Butler Catalog on Field Tanks

"Oil Field Tanks" is the title of a new catalog published by Butler Manufacturing Company, 13th and Eastern Avenue, Kansas City, Missouri.

The catalog includes a general description of Butler bolted tanks, steel stairs, line drawings of bolted tanks, bolt and packing lists, valves, flow and storage tanks, welded field tanks, tool boxes and tool houses.

Copies will be supplied on request to the company.

J. O. Clutter, sales manager for D. & B. Pump and Supply Company, Los Angeles, is on an extended trip through the Mid-Continent, Wyoming and Montana oil fields. Mr. Clutter will introduce to the trade, Milton Brennan, who was recently appointed special representative for D. & B. in the Sunburst and Casper fields.

A. W. Duston, chief geologist and head of the land department for the Independent Oil & Gas Company, with Mrs. Duston and their small son, Dean, are spending about ten days in an automobile tour of Kansas.

Jones Sucker Rods have pleased for Thirty Years.

S·M·Jones Company,
TOLEDO · OHIO

Tulsa Office: 602 Wright Building

TYLER

Boiler Tubes

Charcoal Iron
for bad water conditions—

Lapweld Steel
for good water conditions—

For long tube life.

The Tyler Tube & Pipe Co.
Washington, Pa.

Texas Stock—Harrisburg Pipe and Pipe Bending Co. Houston, Texas

Oklahoma Stock—Harrisburg Supply Co., Tulsa, Oklahoma.

Do you know about

BAROID?

LEADING oil drilling companies in the Mid-Continent, Colorado and Wyoming fields use Baroid to prevent dangerous blow-offs.

Baroid is specially processed barytes which stays in suspension indefinitely, is absolutely inert, non-electrostatic and non-electrolytic. Its sliming qualities protect equipment in drilling through the hardest formations.

Stocks of Baroid are carried by

Peden Iron and Steel Co., Houston, Texas
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Arkmo Lumber Co., El Dorado, Ark.
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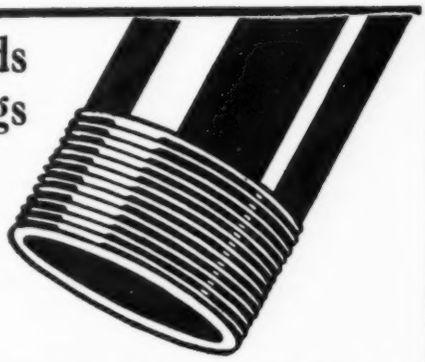
BAROID

NATIONAL PIGMENTS AND CHEMICAL CO.
St. Louis, Mo.

New Threads and Couplings make this pipe a genuine bargain!

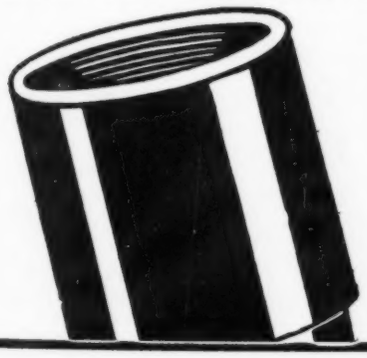


Save money with Greenspon's pipe—prices run ⅓ to ½ lower. You get guaranteed pipe, every length of which has been thoroughly inspected, equipped with new threads and fitted with new couplings. You will get years of service from it.

Greenspon's casing, and ODEE pipe for gas lines, are likewise guaranteed! Ready at our yards in sizes to suit your needs, for immediate shipment.

Write today for prices—see for yourself how much you can save!

JOS. GREENSPON'S SONS



Iron & Steel Company

Saint Louis
Tulsa, Okla.
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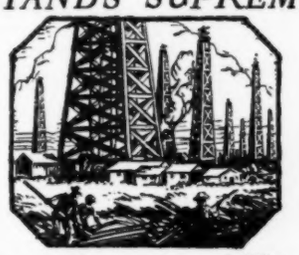
ASCO STEEL
STANDS SUPREME



Time is precious when drilling for oil. Broken Bits require fishing and delays. Every minute counts in the oil field.

Each ton of Asco Steel that leaves our plant has been produced with the sole aim of furnishing the manufacturers of Oil Well Tools, a steel that will give the longest life and stand the hardest usage. Your problems are our problems. May we prove this?

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502 Cosden Bldg., Tulsa, Okla.
61 Fremont St., San Francisco, Calif.
724 Kohler St., Los Angeles, Calif.

THE ANDREWS STEEL CO
NEWPORT ASCO KENTUCKY

DUNN TOOLAGRAM

DEAR FELLAS---

The boss is determined that we are going to say something about Dunn Tools instead of squawking like a lot of gosh darn nuts every time, so he came along to coach us as we go.

"Speed, I told you to talk about Dunn Tools. Now can that stuff, will yuh?"

"Sure, boss, but I got to get the introduction over, don't I? What you think all those guys are goin' to think if I just start bangin' away without any warning? . . . . Say, what the h— do you want me to say, anyway?"

"Sh-h-h . . . . don't cuss like that . . . . tell 'em about 'Cotton' Russell, superintendent of the McDaniel Drilling Company in the Spindletop field, and what he says about Dunn Super-Safety Elevators."

"Say—how do you get that-a-way? How do I know what he sed . . . ."

"Go on, Efficiency, you tell 'em. This little runt will waste the whole day arguin' . . . ."

"Who? Me? Oh, yes . . . . let's see. Where were we. Oh . . . . yes, Speed was just sayin' that Safety sent his regards . . ."

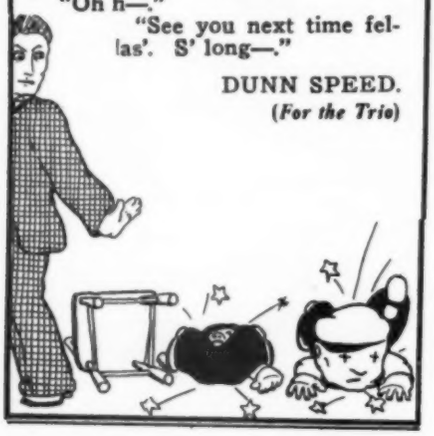
"Shut up, you sap. You've been sleepin' all this time. That was week before last when Safety sent his regards . . . . Now tell 'em about Dunn Elevators."

"Why — uh — you see fellas — it's like this. You know—when you drill a well—an oil well I mean—well—(not an oil well)—but we're still talkin' about an oil well though—well—oh—."

"Oh h—."

"See you next time fellas'. S' long—."

DUNN SPEED.
(For the Trio)



SQUEAKS FROM THE BULL WHEEL

Same Old Story

Under a spreading chestnut tree
  A stubborn auto stands;
The smith an angry man is he
  With trouble on his hands.
The carburetor seems to be
  The cause of all his woe;
He tightens half a dozen bolts,
  But still it doesn't go.
He sits beside the road to give
  His brain a chance to cool,
And ponder on his training at
  The correspondence school.
And then he starts his job once more
  And just by chance 'tis seen
The cause of all his trouble is
  He's out of gasoline.

—T. P. A. Magazine.

Real Salesmanship

As one of the most perfect examples of selecting the most effective selling angle I am reminded of a story I first heard during the war. The officers of one of the colored companies were having trouble getting the darkies to sign up for sufficient life insurance and detailed one of the negro non-coms to help. This non-com presented the proposition in this way:

"If you is insured Uncle Sam values you at $10,000.00. If you ain't, Uncle Sam don't stand to lose nuthin' if you die. Now, I leaves it to you—which bunch of men is Uncle Sam goin' to send to the front line trenches?"—B. M. & T. Facts.

His Role

At a funeral, when everybody had gone inside except a colored boy, the minister asked: "Don't you want to come in, Sonny?"

The boy answered: "No, sah, Ah can't. I'se de crepe."

He: Something seems to be wrong with this engine, it—

She: "Don't be foolish; wait until we get off this main road.—Pelican.

A parking space is where you leave the car to have the tail light knocked off.

Careful Lady

Passach Yerserpsky, 111 years old, was buried today, and his widow, 109 years old, walked from the funeral to her room at the Hebrew home, declining all offers of "lifts" from friends who own automobiles.—Baltimore Paper.

A girl can't be too careful these days. —New Yorker.

Story-Teller: "And while the little boy was sitting in his chair all alone he heard a horrible, horrible wail right behind him. What do you suppose it was?"

Modern Youngster: "Static!"

An American was prowling around a Scottish churchyard. His eyes caught an epitaph, "Lord, she was thin."

"Say, sexton, what d'ye make of that?" he asked.

"That's all richt, sir; the sculptor went over near the edge of the stone and didna leave room for the 'e'."

Rev. Thompson: "How do you do, Mrs. Smith? I hear your husband is ill."

Mrs. Smith: "Yes, I'm sorry to say he is."

Rev. Thompson: "Is he critical?"

Mrs. Smith (with a sigh): "Critical? He's worse than critical; he's abusive."

Teacher: "If there are any dumbbells in this room, please stand up."

A pause, then finally Johnny stood up.

Teacher: "What, do you consider yourself a dumb-bell?"

Johnny: "Well, not exactly that, teacher, but I hate to see you standing all alone."

Stalled

Bus Conductor—"One seat on top, ma'am, and one inside."

Lady—"You surely wouldn't separate a mother from her daughter."

Conductor (ringing bell) — "Never again, lady. I did it once and I have regretted it ever since!"

ANSWERS

Here are the answers to the questions appearing on this page in the last issue:

Nine Pounds.

Scythe.

Saucer.

Six cuts; one with no paint; six with paint on one side; eight with paint on three sides, and 12 with paint on two sides. Total of 27 cubes.

THIS WEEK'S ANSWERS

1. In 1920, 33,911 wells were drilled in the United States.

2. J. C. Donnell, chairman of the board of the Ohio Oil Company, who died recently, is said to have directed the drilling of more than 40,000 wells during his connection with the Ohio Oil Company.

3. Tax on gasoline averaged 2.38 cents per gallon in 1926, the lowest tax being one cent and the highest five cents. This applies to State taxes and does not include inspection fees or city taxes on sales.

4. Daily average production of crude oil in the United States for the week ending April 20, 1927, was 2,499,950 barrels, the highest of record.

5. The Standard group has paid $3,139,154,141 in dividends since the dissolution decree of 1911. Of this amount $1,751,074,896 was paid in cash.

The Ludlow

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Construction Eight Pieces Electrical Steel Without Keys or Setscrews

Simple construction makes the B. B. Bros. All Steel Hand Hoist stand up under severe conditions. Internal and extended drum shafts are part of the drum; external gear, internal brake drum, together with drive shaft and internal pinion are also one piece. All high grade electric steel, practically indestructible. Without keys, setscrews or pins to strip.

Steel Tail Hold Yoke or Truck Attachment. Plate can be Furnished Extra.

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Painted 2 Years Ago with ECLIPSE Tank Paint White

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The photograph above shows tanks of a prominent company of California painted two years ago with one coat of ECLIPSE Tank Paint White, over one coat of ECLIPSE Metal Primer Gray—and still giving perfect protection today. The snowy whiteness of ECLIPSE Tank Paint White is not affected by the hot sun, moisture and air, even over a period of years.

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